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..... *13720-101 Ave*
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THE UNIVERSITY OF ALBERTA

THE CONCEPT AND APPLICABILITY OF INCENTIVES IN THE
ORGANIZATION OF HEALTH CARE SERVICES

by



EARL M. GOLDEN

A THESIS •

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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THE UNIVERSITY OF ALBERTA
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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled THE CONCEPT AND APPLICABILITY OF INCENTIVES IN THE ORGANIZATION OF HEALTH CARE SERVICES submitted by EARL M. GOLDEN in partial fulfillment of the requirements for the degree of Master of Health Services Administration.

Lawrence H. Houtman
.....
(Supervisor)

R. H. McLean
.....
Edna J. Jeff
.....
.....

Date

ABSTRACT

The history of incentive formulation in the organization of health care systems is fragmented and the effects of incentive utilization were not definitive in their applicability to the delivery of health care services. The study consisted of an examination of common incentive approaches; the effects of bureaucratization on organizational incentives; hospital incentive programs; the feasibility of incentives for the health care professional; and finally, the utilization of incentive criteria as an analytical technique in the evaluation of health services program proposals.

The results indicated that serious consideration should be given to the feasibility of an amalgamation of hospital and medical reimbursement systems whereby all participants are held responsible and accountable for the generation of total health care costs. The success of incentive formulation and implementation in the health care field is dependent upon the capability of the health care organization for bureaucratic adjustment; the accountability of all participants for the results of their actions in performing their duties; the immediacy of rewards or penalties to job responsibilities; and the use of qualified management personnel.

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CHAPTER 1

INTRODUCTION

I. PURPOSE

The purpose of this study is to examine the formulation of incentives in the context of selected health services organizations. The examination will include:

1. A review of common incentive approaches,
2. An examination of the potential effects of bureaucratization on service organizations,
3. Examples of hospital incentive programs,
4. The applicability of incentives to the professional within the service organization, and
5. The investigation into the utilization of incentive approaches in the formulation of health services program proposals.

II. SCOPE

The subjects of incentives, motivational behavior and health service delivery systems encompass diverse and often contradictory concepts. Accordingly, a large portion of this thesis is devoted to the development of an analytic framework specific to health service organizations. This study is restricted to two basic parameters underlying the formulation of health service incentive schemes:

1. The level of bureaucratization within the service organization, and

2. The behavior of individuals with regard to the operating efficiency and technical problems associated with the health service organization.

In suggesting changes toward a more efficient and effective health care system, the mechanics by which various geopolitical distributions would be made, are not considered. The general process of regionalization is beyond the scope of this study and the suggestions offered apply to existing facilities and boundaries as well as to proposals containing district or regional changes.

The application of the analytic framework derived from the literature, hospital incentive programs, and organizational theory will be limited to an examination of the report titled The Community Health Centre in Canada, or as it is more commonly known, "The Hastings Report."¹ Aside from the speculative aspects of evaluating a proposal before it has been implemented, the major utility of examining The Hastings Report under these incentives criteria is to provide insight into the relative efficiency-effectiveness of a given program.

¹Canada, "The Hastings Report," Report of the Community Health Centre Project to the Conference of Health Ministers (Ottawa: Queen's Printer, 1970).

III. FORMAT OF THESIS

This thesis is divided into seven chapters. Chapter 1 contains the purpose, scope and format of the study. Chapter 2 examines common approaches to the formulation and implementation of incentive programs while Chapter 3 provides an examination of the effects of bureaucratization on incentive formulation. Chapter 4 reviews some incentive plans utilized in the hospital industry. In Chapter 5, the professional aspect of service organizations is reviewed with regard to the structuring of incentives to affect least-cost patterns of professional practice. This chapter provides a review of reimbursement systems, and suggests the modification of present "fee for service" practice within health service organizations. The major focus of Chapter 6 is on a framework for the analysis of incentive programs for the delivery of health care services. The utilization of incentive concepts in supplying health care is examined by the application of this framework to an analysis of The Hastings Report. Finally, Chapter 7 concludes this study by summarizing criteria derived from the preceding chapters with regard to the implementation of incentives in the health care field.

CHAPTER 2
AN OVERVIEW OF INCENTIVE APPROACHES

I. INTRODUCTION

The purpose of this chapter is to review the literature pertinent to incentive programs. Many different incentive schemes have been proposed to foster efficient and effective production of health care services within the hospital, but few of these programs have been implemented. Of those which have been tried, only limited success has been noted over an initial short-run pilot period. Over time, most of these programs have been abandoned.²

II. INCENTIVE RATIONALE

Incentive plans are usually conceived in order to enhance worker motivation in order to change behavior patterns and foster more efficient and effective means of output.

"The basic concept of incentives as originally formulated was to turn the inherent selfishness of man into a force for greater productivity."³

²E. Gross, "Incentives and the Structure of Organizational Motivation," Journal of the American College of Hospital Administrators, Vol. 16, No. 3 (September, 1971), pp. 8-20.

³J.F. Lincoln, Incentive Management (Cleveland: Lincoln Electric Company, 1951), p. 89.

Therefore, the rationale behind most incentive programs is that they are a money-saving device.

III. THE CONCEPT OF WORKER MOTIVATION

There are many theories of work motivation which run on a continuum from the scientific management approach to the socio-psychological satisfaction of needs and drives. Some of the concepts which are felt to be more relevant to the area of incentive programming will be considered in this section, although an in-depth review of the theories of worker motivation will not be attempted.

The first modern concept of worker motivation was based on the premise that man was completely rational and economically oriented in his work situation.⁴ The scientific management approach, sometimes referred to as machine theory, stressed the use of time and motion studies and piecework payment systems. They were concerned with standardization of job tasks and their institutionalization through limiting controls to singular task processes.⁵ This concept created much resentment and opposition to the use of

⁴ A.S. Tannenbaum, Social Psychology of the Work Organization (Belmont, California: Wadsworth Publishing Company, Inc., 1966).

⁵ For a detailed discussion on the classical models of worker motivation see D. Katz and R.L. Kahn, The Social Psychology of Organizations (New York: John Wiley and Sons, Inc., 1966).

incentives due to the emphasis on the individual as a tool, devoid of social conscience or psychological needs, and only useful to increase output. The subjective judgements inherent in job evaluation and measurement fostered anti-management feelings and a negative connotation of incentive plans.

The backlash to this approach resulted in the development of the human relations school. This concept considers the behavior patterns of the worker in a more complex framework consisting of social and emotional drives which may motivate his actions. The Hawthorne experiment is the classical work in this area⁶ and the following conclusions to the study are offered:

1. The need for recognition, security, and sense of belonging is more important in determining workers' morale and productivity than the physical conditions under which he works,
2. Informal groups within the work plant exercise strong social controls over the work habits of the individual workers, and
3. Work is a group activity about which the social

⁶S.W. Gellerman, Motivation and Productivity (Vail-Ballou Press, Inc., for the American Management Association, Inc., 1963).

world of the adult is primarily patterned.⁷

From this point on the direction of incentive formulation concepts were based not only on economic rewards for the individual but on a raft of social and psychological indicators for the individual within the group. Theorists vied for the use of one or many combinations which would best influence worker motivation over an extended period of time. One example is the concentration on external (job) and internal (social) rewards as motivators in a group setting, the effect of status and status congruency and of the degree of reward in relation to perceived investments.⁸ Another is based on Festinger's theories of cognitive dissonance and rests upon equity/inequity of rewards.⁹

A classification which discusses needs on a lowest to highest hierarchy is proposed by Maslow.¹⁰ It is only by appealing to those needs which have not been met that an

⁷ J.A.C. Brown, The Social Psychology of Industry, Penguin Books (Great Britain: C. Nicholls and Company, Ltd., 1954), p. 85.

⁸ A. Zaleznik, C.R. Christensen, and F.J. Roethlisberger, The Motivation, Productivity, and Satisfaction of Workers: A Prediction Study (Boston: Harvard University, Graduate School of Business Administration, 1958).

⁹ J. Stacy Adams, "Toward an Understanding of Inequity," Journal of Abnormal and Social Psychology 67 (1963), pp. 422-436.

¹⁰ H.C. Lindgren, An Introduction to Social Psychology (New York: John Wiley and Sons, Inc., 1969), p. 80.

individual may be motivated to change his behavior patterns.

The classification is as follows:

1. Physiological needs -- needs involved in maintaining body processes,
2. Safety needs -- needs to avoid external dangers or anything that may harm the individual,
3. Belongingness and love needs -- the need to be given love and affection, and nurturance by another person or persons,
4. Esteem needs -- needs to be valued, accepted, and appreciated as a person, to achieve and be adequate; to acquire status, recognition, and attention, and
5. Self-actualization -- the needs for self-fulfillment.¹¹

Economic rewards would not satisfy all these needs and the first task of the initiator of an incentive scheme would be to decide at what level of the hierarchy is his selected population, or what needs still have to be met.

The concept of achievement motivation for the sole purpose of achievement is a very real consideration in incentive formulation.¹² It is especially important in professional groups such as medicine and nursing where an

¹¹ Ibid., pp. 80-81.

¹² For a detailed discussion on the influence of achievement concepts see D.C. McClelland, The Achieving Society (Princeton: D. Van Nostrand Co., Inc., 1961).

achievement orientation is necessary to fulfill the obligations of accreditation. This concept and causal theories of behavior point to the difficulty in trying to sequence any single cause or single goal orientation in determining individual motivation. Peoples' wants are both dynamic and conflicting and therefore ever changing.¹³ Many different approaches are taken to the aforementioned concepts. Herzberg¹⁴ separates two sets of factors, hygiene (job context factors) and motivation (which offer positive rewards over and above expected remuneration). In sum, he states that when incentive schemes do not work they are aimed at hygiene factors and when they do work they are aimed at the motivating factors.

The approach taken by McGregor¹⁵ is twofold, representing polar views of man. Theory X states that man dislikes work and must be coerced, controlled and threatened into organizational activity avoiding responsibility and

¹³ This is discussed and implied in R. Likert, The Human Organization: Its Management and Value (New York: McGraw-Hill Book Company, 1967), p. 15.

¹⁴ F. Herzberg, B. Mausner, and Barbara Block Snyderman, The Motivation to Work (New York: John Wiley and Sons, Inc., 1959).

¹⁵ Douglas McGregor, The Human Side of Enterprise (New York: McGraw-Hill Book Company, 1960).

desiring security above all.¹⁶ Theory Y states that:

1. The expenditure of physical and mental effort in work is as natural as play or rest,
2. External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service of objectives to which he is committed,
3. Commitment toward objectives is a function of the rewards associated with their achievement,
4. The average human being learns, under proper conditions, not only to accept but to seek responsibility,
5. The capacity to exercise a relatively high degree of imagination, ingenuity, and creativity in the solution of organizational problems is widely, not narrowly, distributed in the population, and
6. Under the conditions of modern industrial life, the intellectual potentialities of the average human being are only partially utilized.¹⁷

Theory Y would suggest that the goals of the employees should be compatible to those of the organization "such that the members of the organization can achieve their own goals best by directing their efforts toward the success of the

¹⁶ Ibid., pp. 33-35.

¹⁷ Ibid., pp. 47-48.

enterprise."¹⁸ Katz and Kahn discuss types of motivational patterns¹⁹ and suggest that needs may be satisfied by actions. These actions may not ordinarily occur except by the offering of rewards. They state that "many human actions are the means to the satisfaction of utilitarian drives or ego needs, and are performed for no other reason."²⁰

This brief review of some of the concepts of worker motivation was undertaken for the purpose of underlining the diverse directions motivational theory takes. In extending these concepts into the rationale for specific incentive formulation models, it is not clear whether motivating people to behave in a desired manner is a problem of incentives, a problem of control, or in the final analysis, an inseparable combination of both factors.

IV. COMMON INCENTIVE SYSTEMS

A. Individual, Group, and Organizational Plans

Incentive systems have taken two general forms, merit rating plans and monetary payment schemes. Monetary payments attempt to "increase the motivation of employees to

¹⁸ Ibid., p. 49.

¹⁹ D. Katz and R.L. Kahn, op. cit.

²⁰ Ibid., p. 344.

contribute to the goals of the organization by offering financial inducements above and beyond basic wages and salaries."²¹ Merit rating plans apply salary ranges within each step on a hierarchical ladder. Movement within these ranges is dependent on merit, and/or length of service.²²

The most common reward systems are individual, group, and organizational incentive systems. Individual systems usually take one of three forms: piecework and standard time where the individual is paid a set amount for each unit of output; shared gains where the individual receives a percentage of the value of his output over and above a standard amount; and variable returns where the individual receives a per-unit fee which depends on his level of output.

Group incentive systems are based on the pooled earnings of a group of employees, each receiving a percentage of output value over and above a standard amount. The added percentage is a result of cost savings or reduction of labour. The group may include all employees or any department(s) within an organization.

Organizational incentive systems are further removed from the employee who receives the benefits, and usually are

²¹W.L. French, The Personnel Management Process: Human Resources Administration (New York: Houghton-Mifflin Company, 1964), p. 284.

²²D.S. Beach, Personnel: The Management of People at Work (New York: MacMillan Company, 1965), p. 636.

not felt to be controllable in any way by individual effort. Examples are profit-sharing, stock purchase options, and pension plans. As mentioned previously, these tend to reduce worker turnover but may have little effect on behavior modification.

B. Problems With Incentives in Practice

In considering any incentive system the implication of setting standards of operation and employee motivation are of prime concern. Attempts are made to firm up a department (or organization) to aid in applying the incentive plan. The formulation of standards means that the department receives special attention which is bound to have some effect. Along with this, the workers are usually involved in the process of "readiness" and such things as communication flow and supply stocks are checked and made ready. This unusual activity and interest in the department and workers alike may be all that is needed to increase worker morale, efficiency and effectiveness. The added implementation of the incentive program, after the period of readiness, may add little or nothing to the department, but the separation of readiness effects (involvement) and incentive effects are difficult and usually not considered.

The literature on worker motivation seems to indicate that the further the benefit is from the worker and the less control he has over receiving it, the less powerful the incentive. This would seem to have serious implications

with regard to total organizational plans such as retirement pension schemes, methods of profit sharing, vacation bonuses and the like. These programs may serve the purpose of holding an employee to his job but may do little to improve behavior or work patterns.

The success of incentives as a money-saving device has not been proven, especially in the health care field. There are many added costs associated with the implementation of incentive programs which are not immediately apparent. Some of the costs which may be hidden from view are as follows:²³

1. Job evaluation,
2. Wage and salary administration,
3. Time and motion study,
4. Accounting,
5. Negative aspects of individual competition within a group,
6. Supervision, and
7. Group conflict due to measurement techniques and subjective standards.

Gross states that when these costs are added up, the total may be the same as before the plan was initiated.²⁴ In this article many other factors of consideration in incentive

²³E. Gross, op. cit., pp. 8-20. /

²⁴Ibid., p. 14.

implementation are discussed: employee resistance, identification, limits of economic rewards and suspicion and manipulation. He sums up his article as follows: "An incentive system will not, then, make a hospital work more effectively. But an effective, well-run hospital may provide the environment for an incentive system to work."²⁵

C. An Example of Available Literature on Health Care Incentives

The question of which type of incentive scheme is best, depends on the situation under study. All incentive systems have characteristics which may aid in reaching specific objectives but the key to success is proper implementation under favorable organizational conditions.

One such example of a combination approach of incentives which has been tried is documented in Hardwick and Wolfe's article "A Multifaceted Approach to Incentive Reimbursement."²⁶ This article reports that three distinct experiments are being tested in Western Pennsylvanian Hospitals.

1. Placing of industrial engineers in 3 hospitals to work as an arm of the hospital's administration in seeking

²⁵ Ibid., p. 20.

²⁶ C. Patrick Hardwick and H. Wolfe, "A Multifaceted Approach to Incentive Reimbursement," Medical Care, Vol. VIII, No. 3 (May-June, 1970), pp. 173-188.

and analyzing potential cost-reduction situations and making recommendations to improve the existing systems. Incentives were to be paid to the hospitals on the basis of real savings made for each program that is implemented.

2. Utilization of statistical techniques to determine the relationship between total cost and various independent variables such as services, education, case mix, etc. Incentives would be paid on the difference between actual and projected costs.

3. A negotiated budget incentive based on accurate forecasting and agreement as to reasonableness.

The methods of implementation are discussed in detail, but the results are based on specific hospital idiosyncracies which leave the main question the article posed unanswered. Which method has the better general applicability? The only concrete savings were shown by the addition of industrial engineers to the hospital staff, and these results were based on one year. If the results can be replicated it would indicate that superior management was a crucial variable introduced into the system. This addition of external management was a proxy for superior internal management and the actual incentive method used may be of little importance.

CHAPTER 3

INCENTIVES AND THE LEVEL OF BUREAUCRATIZATION

I. INTRODUCTION

From the preceding review, incentive schemes may be of questionable long term value. Many factors may be at work which are advantageous in some situations and disadvantageous in others. The concept of man as rational and as a purely economic being is an example of this. The effect of the individual upon the group and group pressure upon the individual; achievement motivation; hygiene versus motivator factors; and integration and fulfillment of needs based on a physio-psychological hierarchy, may all be appropriate in a given time and specific situation. The problem here is the difficulty of controlling organizational variables which may change a particular environment from moment to moment, thereby rendering a plan, based on motivational theory, inoperative. This chapter will examine the potential effects of organizational variables with regard to the formulation of incentive schemes.

All organizations have some common structural variables which may promote motivational incentives and/or disincentives. Organizational changes are considered and implemented in order to further specific goal attainment.

Underlying these objectives, two major classifications of change are usually involved: the change in an organization's level of adaption to its environment, and the changes in the internal behavior patterns of employees.²⁷ While the more common approach to behavior modification is to mold the behavior of the individual to the organization,²⁸ the emphasis to be applied here is that of changing the organizational structure to allow for behavior modification.²⁹

"... the structure of an organization is not an immutable given, but rather a set of complex variables about which managers can exercise considerable choice."³⁰

Organizations may be more or less bureaucratized with a higher or lower level of informal organization contained therein. The degree of bureaucratization may influence the

²⁷ These major classifications of organizational change are discussed by Greiner and Barnes in their article Organizational Change and Development. They are considered in the context of objectives of change rather than in the context of resultants of most change techniques as noted above. Their usage of these concepts may be found in: G.W. Dalton, P.R. Lawrence and L.E. Greiner (eds.), Organizational Change and Development (Ontario: Irwin-Dorsey Ltd., 1970), p. 2.

²⁸ Charles Perrow, Complex Organizations, A Critical Essay (Illinois: Scott, Foresman, and Company, 1972). A summary of approaches to organizations through behavioral models is contained in Chapter 4, pp. 145-176.

²⁹ P.M. Blau and W.R. Scott, Formal Organizations (San Francisco: Chandler Publishing Company, 1972).

³⁰ G.W. Dalton, P.R. Lawrence and J.W. Lorsch (eds.), Organizational Structure and Design (Ontario: Irwin-Dorsey Ltd., 1970), p. 1.

structure and process of incentive formulation. In order to examine the effect of formal organizational structure (bureaucratization) on incentive formulation, the bureaucratic characteristics of rationality and specialization, impersonality and hierarchy of authority have been selected for consideration.³¹ Their potential effect upon motivation within the organization will be examined along with their effects on the organization, the client, and the worker.

II. LEVEL OF BUREAUCRATIZATION

In terms of the level of bureaucratization, the large scale organization may inhibit the freedom of individual employee behavior. If bureaucracies are set up to deal with stable, routine tasks, then the efficiency of the bureaucracy may depend on the degree to which extraorganizational influences upon the worker's behavior are controlled.³² Conversely, where the level of bureaucratization is inhibiting efficiency, incentive programs may increase productivity and efficiency within the organization. The following discussion will examine the negative effects of

³¹These are the features of a bureaucratic structure as examined by Weber. A summary is contained in: A. Etzioni, Modern Organizations (New Jersey: Prentice-Hall, Inc., 1964), pp. 53-54.

³²This concept has been adapted from C. Perrow, op. cit., p. 5.

bureaucratization on employee motivation. *

One of the negative effects of bureaucratization is the alienation felt by the members. In terms of his position within the organization, this is made up of the following dimensions: (a) powerlessness, (b) meaninglessness, (c) normlessness, (d) self-estrangement, and (e) isolation.³³ Large size³⁴ can result in alienation as powerlessness in that the sheer immensity of the organizational setting makes the worker feel that his own behavior cannot determine the outcome he seeks in his work because he is simply one of many workers. Therefore, he feels (although he is usually careful not to show it) a high degree of anonymity. Further, the large size of an organization implies that it has a great deal of power -- the organization represents a concentration of power and its effect, as C. Wright Mills observed, is to coerce, to manipulate:

"Organizational irresponsibility, in this impersonal sense, is a leading characteristic of modern industrial societies everywhere. On every hand the individual is confronted with seemingly remote organizations; he feels

³³R. Blaumer, Alienation and Freedom (Chicago: University of Chicago Press, 1964).

³⁴"Size" in the context of this chapter is used as a proxy for the level of bureaucratization. For a discussion of the shift from a traditional organization to a rational-legal bureaucracy due to increased organizational size, refer to C. Perrow, op. cit., p. 4.

dwarfed and helpless before the managerial cadres and their manipulated and manipulating minions."³⁵

Isolation and estrangement may also result because the employee may find it difficult to identify with the large number of people found in the organization. While small group membership eases the problem, it does not necessarily improve the individual's rapport with the organization qua organization. Further, large size may intensify the effects of other conditions or characteristics of the organization. This may be reflected by low morale, low productivity, and absenteeism which all have been found to be associated with organizational size.³⁶

Motivational incentives could be considered to help control or eliminate some of the above-mentioned problems. Incentive programs which try to blanket the multi-dimensional problems of organizations with a "cure-all" approach would seem to have almost insurmountable difficulties in coming to grips with actual problem areas. Size may be an asset to efficiency, but after reaching an optimal point, the law of diminishing returns plays an important part in considering motivational incentives which

³⁵C. Wright Mills, White Collar (New York: Oxford University Press, 1956), p. 187.

³⁶W. Lloyd Warner and J.O. Low, The Social System of a Modern Factory (New Haven: Yale University Press, 1947).

may be of value. Incentives to combat the negative characteristics associated with size should lead to outcomes such as cooperation, cohesion, integration, morale, and common value sets which would help align compatible goal orientations.³⁷ This would foster a participative (democratic) style within the organization. This style has shown to be more efficient in terms of the above aspects.³⁸

III. RATIONALITY AND SPECIALIZATION

The large size of agencies fosters large administrative problems, the solution of which requires rational thinking.

"Rationality may be defined as the capacity for objective intelligent action. It is usually characterized by a patent behavioral nexus between ends and means. While rationality is always limited by human error, inadequate information and chance, within these limits the rational person applies intelligence, experience, and technical skills to solve his problems. In an ideal-typical organization rationality is sought by organizing and directing its many parts so that each contributes to the whole product with utmost efficiency."³⁹

³⁷ A discussion on unobtrusive measures of control, see Blau and Scott, op. cit.

³⁸ D. Katz and R.L. Kahn, The Social Psychology of Organizations (New York: Wiley, 1966).

³⁹ Robert Presthus, The Organizational Society (New York: Knopf, 1962), p. 52.

This process of rationality results in standardization of activities and careful recruitment procedures within an organization. On the other hand, overspecialization (fragmentation of worker tasks) may induce a sense of task meaninglessness for the employee, thereby burdening him with the accepted means of procedure which are usually implicit in his role. He does not directly service organizational objectives throughout his career but is just a single strand in a web of specialized departments. It is then reasonable to assume that sooner or later the worker would lose sight of the goal of the organization and would be more concerned with the rules and regulations governing his particular position. The goal would then cease to be anything more than an abstraction and the client an object which must meet specific requirements in order to facilitate the workers existence. Whether the object does in fact meet these specifications is immaterial to the worker for it is usually just a means of deciding to which other department it will be referred. Specialization also lowers the cost of running an organization, for the lowest paid and many of the less-trained workers spend the most time with the client on a face to face basis, the directives coming from the more specialized and higher-paid workers.

These two characteristics of rationality and specialization tend to divorce the worker from the ultimate purpose of the organization. The rationale of the technical

and social organization is comprehended fully only by a few people at the top, if indeed by anyone at all. The stress of this dichotomy is unequally distributed among employees because the nature of an organization affects the ability to wrest a sense of purpose from his work: Working in a small service organization may enable the worker to see the relationship of his contribution to the whole; team work may increase meaningfulness, but even here the client is usually taken out of the teams' hands before any interpersonal relationships have become meaningful.

Even in the upper levels, considerable imagination is required to feel a personal relationship with, and to derive a sense of value from the part played by the specialist in the coordination of his perceived function in rendering the service which the organization espouses.

Desired outcomes to be considered here are similar to those pointed out in the previous section on size but with more direct emphasis upon knowledge of the organization as a whole and the importance of the various parts within it. The personal disincentives due to rationality and specialization are based upon communications within the organization. For example, programs based upon monetary incentives to the employee would not, in this area, be of any lasting worth and would not have any effect on the bureaucratic root of the problem.

IV. IMPERSONALITY

The efficiency of the organization will suffer if emotions or personal considerations influence administrative decisions. Thus, organizations promote impersonal relationships by excluding from the administrative hierarchy those interpersonal relationships that are characterized by emotional attachments and also by socializing this value into the individual worker.

"... the more bureaucracy 'depersonalizes' itself, the more completely it succeeds in achieving the exclusion of love, hatred, and every purely personal, especially irrational and incalculable, feeling from the execution of official tasks. Modern Capitalism requires for its sustaining external apparatus the emotionally detached, and hence rigorously 'professional' expert."⁴⁰

This impersonality leads the organization to take an instrumental and manipulative view of man. Within a service organization it may feed the fires of professional dishonesty because of the dual role of the professional worker. On the one hand he is interested in helping an individual and on the other, in helping to control that individual's behavior if it is contrary to the expectations of the organization. This malfunction in the worker results in his lying to the client regarding the purpose of his interest in him. In the following quotation substitute the word organization for the

⁴⁰ Hans Gerth and C. Wright Mills, "From Max Weber," (New York: Oxford University Press, 1951), p. 216.

word community.

"When the community's needs conflict with the adolescent's needs, it is the community that must be obeyed and decisions are not always made entirely in the patient's interest."⁴¹

This contradiction in the purpose of the organization and worker and the impersonality which surrounds their activities is a barrier which cannot easily be breached.

There is a level of impersonality within an organization which should promote efficiency without alienating the member of an organization. Motivational incentives might perhaps be directed toward status considerations consisting of many factors (not strictly monetary) such as rank, expertise, recognition and esteem accorded him by relevant others. In this way impersonality might be used more effectively in fostering cohesiveness and developing cooperation toward a similar value set and a more compatible goal orientation.

V. HIERARCHY OF AUTHORITY

A high degree of specialization creates the need for a complex system of coordination. The head of a large organization cannot be in direct contact with all the employees at all times. Therefore, responsibility is

⁴¹Halleck, "The Impact of Professional Dishonesty on Behavior of Disturbed Adolescents," in Stratton and Terry, Prevention of Delinquency (New York: The MacMillan Company, 1968), p. 139.

exercised through a hierarchy of authority which furnishes lines of communication between top management and every worker for obtaining and submitting information on operations and transmitting operating directives. Organizations vary in the extent to which members are assigned tasks and then provided the freedom to implement them without interruption from superiors -- this is the delegation of hierarchy of authority. There is also variance in the degree to which staff members participate in setting the goals and policies of the entire organization -- this is the degree of participation in decision-making. These two concepts are aspects of centralization -- the locus of authority to make decisions affecting the organization. Another concept which varies with organizations is formalization -- the official procedures which prescribe the appropriate reactions to recurrent situations and furnish established guides for decision-making.

A look at two relevant studies dealing with hospitals and welfare agencies is appropriate at this point.

Pearlin⁴² has examined alienation deriving from the authority structure of a large hospital. He defined alienation as "a feeling of powerlessness over one's own affairs -- a sense that the things that importantly affect

⁴²Leonard J. Pearlin, "Alienation from Work: A Study of Nursing Personnel," American Sociological Review 27 (November, 1963), pp. 315-326.

one's activities and work are outside his control,"⁴³

He found that alienation was most exacerbated under conditions that minimize interaction between superordinates and subordinates and, consequently that reduce the opportunities for the latter to influence informally the former. This is reflected in his findings that intense alienation is most likely to occur (1) where authority figures and their subjects stand in relations of great positional disparity, (2) where authority is communicated in such a way as to prevent or discourage exchange, and (3) where the superordinate exercises his authority in relative absentia. He further discovered that neither positional disparity nor the preemptory exercise of authority was alienative for workers who have an obeisant regard for the honorific aspect of status.

Aiken and Hage,⁴⁴ in their comparative analysis of social welfare agencies, measured alienation from work in terms of work dissatisfaction and alienation from expressive relations in terms of satisfaction with supervisors and fellow workers. They hypothesized that the degree of alienation from work and from fellow workers would be greater

⁴³ Ibid., p. 316.

⁴⁴ Michael Aiken and Jerald Hage, "Organizational Alienation: A Comparative Analysis," American Sociological Review 31 (June, 1966), pp. 497-507.

in highly centralized organizations than in decentralized ones. They found that in organizations that rely heavily on hierarchical arrangements, alienation from both work and expressive relations is found. They explain this result by noting that a strict hierarchy of authority reduces the opportunities for communication among the members of an organization; the consequences of reduced communication is alienation from fellow workers. Alienation from work is the consequence of little participation or influence in agency-wide decisions. Thus, a high degree of centralization as measured by participation in organization-wide decisions and degree of control over assigned tasks is related to the presence of work alienation and disenchantment with expressive relations, especially with superordinates.

A high degree of formalization implies not only the preponderance of rules defining jobs and specifying what is to be done, but also the enforcement of those rules. Aiken and Hage found that the degree of alienation from work and from fellow workers varied with the degree of formalization (measured by indices of rules observation and job codification). Results showed that there was great dissatisfaction with work in those organizations in which jobs are rigidly structured (high job codification); however, while rigidity may lead to strong feelings of work dissatisfaction, it does not appear to have such a deleterious impact on social relations in the organization. Organizations in which rules

are strictly enforced have high degrees of both work alienation and alienation from expressive relations.

"The relationship between rule observation and alienation from expressive relation is slightly greater than with alienation from work, suggesting that disruptions in social relations may be more likely to occur under conditions of highly structured jobs."⁴⁵

VI. BUREAUCRATIZATION AND INCENTIVES

A. Organizational Effects on Client and Worker

The large organization may not offer service for the well-being of the client but for the continuance of, and the rationale for, its existence. The important criteria become the work out-put, the number of clients serviced, the expansion of its facilities and its quest for more financial resources in order to pay higher wages, employ more people and expand its territory. As the organization acquires more power its responsiveness to the client diminishes in proportion.

The process of bureaucratization in a large organization should be an asset to the client. In actual practice this is not always the case. The loss of intra-organizational contact may have a detrimental effect on both the worker and the client. The special circumstances surrounding a client are secondary unless they can be

⁴⁵ Ibid., p. 504.

processed through one of the formal channels. The professional worker may not see the client who feels there are extenuating circumstances surrounding his or her case unless the file comes into his possession through the established channels of communication. In many cases this does not happen as the less skilled and the lower paid are the workers who decide why and where in the organization the client will be sent. Because of the dominance of the bureaucratic characteristics of rationality and specialization, impersonality, and hierarchy of authority, the client's need may be minimized in favor of organizational and worker efficiency.

B. Incentive Formulation

It is not possible to suggest an alternate structure for organizations which would not affect countless other agencies and institutions in society. There is much research to be done in this area before any major changes are implemented; however, it may be possible to reduce the negative effects of bureaucratization by modifying the structural characteristics within the organization.

When an organization reaches what is considered to be its maximum size, a new organization (or department therein) could be established, relatively autonomous, to perform its service in an efficient manner. Whether the tasks to be performed are routine and can be bureaucratized, or non-routine and organized professionally (on the basis of

professionally trained workers), some level of bureaucratization is essential for administrative efficiency. The original organization could be decentralized rather than expanded to encompass a greater workload.

It is in this context of an autonomous organization that bureaucratic characteristics could be controlled in their implementation, thereby countervailing the problems of its insensitivity to the needs of worker and client alike. The contact between members could be on a more personal level in a smaller organization, thus simplifying communication and cooperation. Given a potential increase in communication and cooperation, it may be said that structural change has served as an incentive factor.

Further to considering the effects of bureaucratization in the formulation of incentive programs, the professional component of service organizations should be examined. The very nature of services provided by health care organizations requires the input of diverse professions. Chapter 4 will review actual hospital incentive programs, and Chapter 5 will examine the potential effect of incentive programs on the behavior of the professional within the service organization.

CHAPTER 4

HOSPITAL INCENTIVE SYSTEMS

I. INTRODUCTION

In this chapter, an examination of hospitals which have implemented different types of incentive plans will be undertaken. These hospitals have been selected based on the availability of documentation and on personal knowledge of the systems. The plans will be discussed in the context of benefits (previously noted in Chapters 2 and 3) and technical problems which can be directly related to the content of these programs.

II. MEMORIAL HOSPITAL OF LONG BEACH

The Memorial Hospital contained 444 beds and employed 1100 people. This hospital implemented an incentive program based on a total organizational framework. Productivity contributions are based on the employee being motivated to:

1. work smarter, not harder,
2. save on materials and equipment,
3. cooperate with one another to achieve group goals.⁴⁶

⁴⁶J.J. Jehring, Increasing Productivity in Hospitals: A Case Study of the Incentive Program at Memorial Hospital of Long Beach (Madison, Wisconsin: Center for the Study of Productivity Motivation, 1966), p. 4.

Incentive plans should result in the following:

1. The employee would be better off financially,
2. The patients would receive lower costs and/or better service,
3. The hospital would be able to pay for better housing and equipment.⁴⁷

This hospital did appear to reach these objectives, but whether or not it is the effect of the incentive program is questionable. The plan which was implemented was the Memorial Employees Retirement Incentive Trust (MERIT plan). This was a savings-sharing plan, the sharing based on budgetary gains as a proxy for a measurement of efficiency.

The MERIT formula for a performance base was calculated by taking the total operating revenue for a three year base and dividing the average into the controllable costs for the same period.⁴⁸ This was converted into an "efficiency" percentage which was compared to that of the current year. The employer's contribution then equalled the product of the total payroll for the year by the efficiency improvement percentage. This formula appears crude and open to misinterpretation. Limitations of hospital liability

⁴⁷ Ibid., p. 5.

⁴⁸ This averaging process was eventually pegged in favor of a satisfactory base chosen by management as it was realized that the averaging process would net the employee less and less each year. Ibid., p. 43.

were also imposed:

1. A floor of no less than 1% of payroll and a ceiling of no more than 5% of the payroll was placed on the contributions of the hospital,

2. The hospital's contribution could not exceed 50% of employer's net operating gain before allocation of expenses to the MERIT fund,

3. It could not exceed 15% of the annual compensation of all participating employees.

The hospital's contribution is divided among all participants in a ratio of their earnings to the total earnings of all participants. The fund is paid into the trust and is invested by the trustees with the guidance of the administrative committee. Payment is made from the trust fund at severance, death or retirement.⁴⁹

This, in essence, is the MERIT plan. It is based on payroll deductions of the employee on a volunteer basis and not all employees choose to join. How the overall efficiency in the hospital was due to this plan, is not made clear. The plan is simply a retirement savings plan with an economic incentive to increase individual returns at a future date. Many organizations have similar and better paying plans, but it is seldom suggested that they change individual behavior patterns. They do offer added security

⁴⁹ Ibid., pp. 9-10.

for those who have no intention of leaving their job and they are an incentive to reducing job turnover⁵⁰ but there is no evidence in this study that any other accomplishments are due to the plan. The MERIT plan has some serious defects even as a savings incentive. First of all, the contributions of the employees are deducted from their wages and invested in the trust fund. The hospital adds a contribution to these individual amounts based only on a percentage of a percentage saving directly due to the employees' efforts and based upon management criteria of controllable costs.⁵¹ If the employee leaves the fund before the retirement age of sixty-five, only his portion of the contribution is returned plus any earnings of the fund based on that figure. This is a net figure after the deductions of trust administration payouts to other employees and other "miscellaneous" expenses. This "benefit" only applies to employees with a vested share. The meaning of this term "vested" according to the MERIT plan is "After two full years of participation in MERIT, your vested share

⁵⁰ Ibid., pp. 74-75. This only held true in certain categories, the turnover for the hospital in general did not show a significant difference.

⁵¹ The controllable costs are not stated nor are the criteria for their selection. It is questionable whether this is, in fact, possible. "So do not expect to obtain a crystal-clear concept of a controllable cost. Such a concept does not exist, except in the abstract." From, C.T. Horngren, Accounting for Management Control, 2nd edition (New Jersey: Prentice-Hall, Inc., 1970), p. 328.

or your share of the hospital contributions credited to your account would be 10% and this would increase by 10% each year. At the end of eleven years you would have 100% vesting or ownership of all hospital contributions put into your account."⁵² In other words, in order to receive maximum benefits, you would have to stay with the hospital for eleven years.

Other factors must also have a bearing on the efficiency achieved by this hospital. Of some influence would be the new ten million dollar facility which the Memorial Hospital moved into one year before the implementation of the plan. Another aspect of some importance is the emphasis of management techniques in conjunction with the incentive program. The list of these techniques read like the motion of a well-oiled machine which is under constant supervision and maintenance. There is a general employee indoctrination given twice monthly to all new employees along with special enrollment campaigns twice yearly. Special MERIT meetings are also held in an attempt to increase membership. The "selling points"⁵³ for MERIT are handed out and followed up by individual MERIT members who explain the advantages of the program. A MERIT film is also used for indoctrination. An Employee's Advisory

⁵² Ibid., pp. 34-35.

⁵³ Ibid., p. 14. These are well documented.

Committee plays an important role and also union cooperation is sought.

A working simplification program is used in conjunction with the MERIT program in this hospital. This began with a training program for managers and supervisors followed by the training of employee groups. Over six hundred employees (both members and non-members of MERIT) were trained during this study. After the training, a methods engineer coordinated a "sizeable number of projects" and coordinators were chosen to guide and stimulate activities. The work simplification is organized as follows:

1. The overall direction of the program remains in the hands of the training director,
2. A full-time R.N. has been selected and trained to devote full time to the program,
3. All major departments have appointed a departmental representative and one or more team captains. The representatives function largely in projects of an inter-departmental nature. The team captains function largely in problems related to their own departments,
4. The coordinator assumes the responsibility for organizing inter-departmental teams, for providing guidance, direction, and follow-up on all projects. She also directs the reporting and evaluation procedure of the various

projects.⁵⁴

What has taken place, and seems to be constantly taking place in this hospital, is the involvement of more and more employees in the process. The management's superiority is shown by the level of accountability and responsibility constantly being placed on the employees in the execution of their tasks. There is no doubt that efficiency is being fostered in this hospital, but there is doubt that it is due to the implementation of the MERIT plan as an incentive program.⁵⁵

The question of actual cost-saving is the final consideration in examining the MERIT plan. The answer to this is unknown. Due to the accounting procedure reported in this study, it is impossible to segregate the controllable costs which were considered in the base formula. It is also not clear whether evaluation of cost reduction in the worker simplification program, included the salaries of the expertise hired specifically for training, implementation, supervision and control. The final point to be made is that attempting to compare hospitals is a questionable exercise due to the effect of a vast array of uncontrollable

⁵⁴ Ibid., pp. 24-25.

⁵⁵ The conclusion that efficiency is a fact in this hospital is further supported by the author's observations and subsequent report after a visit to this particular hospital during the month of July, 1973.

variables.

In sum, the Memorial Hospital is an efficient organization, the employees have received an additional economic benefit relative to their position before the implementation of the plan, and a multiplicity of control features are apparent. Whether the plan has acted as an incentive and whether the hospital has benefited by its use is not answered by the results of this study.

III. THE BAPTIST HOSPITAL, PENSACOLA, FLORIDA

The Baptist Hospital is an independent non-profit hospital with 333 beds and an average of 602 full-time equivalent employees. This hospital implemented a group-type incentive plan to aid in the reduction of man-hours and supply costs and to increase the voluntary involvement of all participants.⁵⁶

The program implemented was similar to that of the Memorial Hospital previously discussed only based at the department level. A retirement savings plan had been implemented previous to this sub-system incentive program, but had not proven to be effective in increasing motivation to work more efficiently. The incentive plan was originally

⁵⁶ J.J. Jehring, The Use of Subsystem Incentives in Hospitals: A Case Study of the Incentive Program at Baptist Hospital, Pensacola, Florida (Madison, Wisconsin: Center for the Study of Productivity Motivation, 1968), p. 1.

installed in the Laundry department but was rapidly expanded to other departments as the initial success was noted. It is important to consider that this hospital was performing above the national standards before the incentive scheme was operationalized. "Thus at Baptist Hospital it was not a matter of turning an inefficient operation into an efficient one, but rather improving even more on the performance of an already efficient organization."⁵⁷ The factors used to develop the departmental incentive formulas were:

1. man-hours worked,
2. actual cost of supplies consumed,
3. units produced.

Based on these factors the following norms were established:

1. Cost per unit of activity produced,
2. Gross or net profit on operation,
3. Percentage relationship between the factors.⁵⁸

Positive gains seem to have been accomplished in a few of the departments involved in the experiment, although the results are based on short term analysis. The departments of Laundry, Medical Records and Laboratory were the three mentioned in the report.⁵⁹ The results of the study

⁵⁷ Ibid., p. 53.

⁵⁸ Ibid., p. 2.

⁵⁹ Ibid., p. 53.

are as follows:⁶⁰

1. It is possible to design subsystem incentives for hospitals which will result in increased productivity,
2. Using subsystem incentives it is possible to raise wages without raising costs,
3. Subsystem incentives are easier to apply in some departments than in others,
4. The nursing departments pose some special problems in applying subsystem incentive plans,
5. Subsystem incentive programs tend to make hospital employees more receptive to methods improvements,
6. It is more difficult and takes experimentation to design departmental formulas which will give comparable rewards for comparable performance to individuals in the different departments. As more experience is obtained in a variety of hospitals, this may be solved,
7. The subsystem formulas should be designed to meet special needs of each hospital,
8. Too great a difference in productivity shares paid between departments can result in poor inter-departmental cooperation,
9. Little incentive will result from a total systems incentive such as the Baptist Incentive Retirement Trust unless a definite program is instituted which makes

⁶⁰ Ibid., p. 70.

effective use of the motivational potentials in the plan.

It would seem that the subsystem group incentives plan is also fraught with many problems. No attempt will be made to evaluate the formulation of standards or measurement of change utilized, although the same questions that were considered in regard to the Memorial Hospital study would apply.⁶¹ It would be more meaningful to the reader if a follow-up over time were included to observe changes which may have ultimately resulted due to the program. This study ends with the comment that good management practices are imperative to incentive schemes and also avoids the problem of the allocation of control and supervision costs as controllable in incentive formulation.

IV. THE GREATER NIAGARA GENERAL HOSPITAL, NIAGARA FALLS, ONTARIO

The Greater Niagara General Hospital is a 410 bed community general hospital in Canada. This hospital developed an incentive scheme, similar in nature to that of the Baptist Hospital, based on a department or group-type plan. The results of this incentive program after one year's

⁶¹The comparison of one person's efforts in executing a specific task with that of another person's in executing a different task is like the futility of comparing apples with oranges.

operation is now offered for consideration.⁶²

The basic purposes of the departmental incentive scheme used in this hospital were cost reduction, quality improvements, and more effective general hospital departments. Specific goals of achievement are as follows:⁶³

1. To share the benefits of improved productivity with all employees who make it possible,
2. To involve every employee to the fullest extent possible in the operation of the hospital,
3. To encourage employees to think about how the hospital may be made more efficient, and how the quality of patient care may be continually improved,
4. To contain costs to the maximum extent possible, while ensuring the maintenance of a high standard of patient care,
5. To make the hospital a "thriving" and "dynamic" institution, rather than simply a "good, average" hospital.

The basic principles of the incentive plans are similar to those of both the Memorial and Baptist Hospitals, consisting of, a fair base; reasonable reward to employees over controllable items; scaled reward based on productivity increase; and a fixed formula to be changed only by mutual

⁶² These results are taken from: The Greater Niagara General Hospital (GNGH), Productivity Incentive's Report: One Year's Results (February 8, 1971).

⁶³ Ibid., p. 2.

agreement. Three departments were included in the initial program, Radiology, Laundry, and the Operating Room. The results and problems which occurred are offered, based on the GNGH report.

The Radiology department was the first participator in the program initiated in the fall of 1969. The results seemed positive and the full time staff received a payment of \$455.70 per employee for the calendar year 1970. This was made up of \$344.89 salary savings and \$110.81 supply savings. The problems experienced were:

1. Staff involvement: The staff of the department involved must be fully knowledgeable of the program. Furthermore, they must be aware of the changes that are necessarily made during the course of the program,
2. Evaluation and follow-up: In any incentive program, continual evaluation is imperative. This follow-up time is very time consuming, but is essential if the program is to function effectively,
3. Quality: This is one of the most important aspects of the program. Quality must remain paramount. There is little point in reducing dollar costs at the expense of quality. Experience has shown that quality will actually improve with productivity gain,
4. Productivity and the budget: Although the program is not based upon the departmental budget, this aspect cannot be ignored. In future, however, the budget

will, of course, be more closely tied to productivity experience,

5. Complexity: This is probably the most important problem to be faced. The program is very complicated, with the result that it could be somewhat difficult to understand. This occurs primarily because of the unit value approach.⁶⁴

The second participant was the Laundry department which became involved in March, 1970. The results were also positive in terms of monetary payments to employees. The annual payout per employee was \$421.96 based on salary savings as no supply savings were accomplished. The problems were similar to those of the Radiology department.

The Operating Room became the third participant on October 12, 1970. The results and problems are not discussed because of the short time that this department was involved in the program. It is noted that "Morale in the department is high and there appears to be a conscientious effort being made toward greater effectiveness."⁶⁵

In general, in all three departments an increase in productivity was noted but there was no total cost reduction

⁶⁴ Ibid., pp. 9-10. Here again is the problem of comparing individual efforts (see footnote 61).

⁶⁵ Ibid., p. 14.

in terms of budget analysis.⁶⁶ At this point the E.S.P. (Employee Savings Program) was introduced along with a Suggestions Program. The E.S.P. program is a total hospital incentive program similar to that of the Memorial Hospital, but based on cash payments twice yearly as opposed to investing the sum in a trust fund. It was initiated along with the department incentive program, not in place of. The report ends on an enthusiastic note praising the idea of group plans and looking forward to greater results for the coming year.

Following the general format of this section, one should comment on some of the problems which may occur in this incentive program over an extended period of time -- the underlying rationale based on the purpose of this paper.⁶⁷ Fortunately, the 1972 Budget Report of the GNGH has done this task for me.⁶⁸

"The three departmental programs in X-ray, Laundry, and Operating Room continued to operate in 1971, but it is planned to phase them out into the general overall plan effective January 1st, 1972. The experience

⁶⁶ Ibid., p. 15.

⁶⁷ The purpose of this paper being the hypothesis that offering benefits without applying burdens for non-achievement may negate the use of incentives as feasible or positive organizational tools.

⁶⁸ The Greater Niagara General Hospital, Fifth Annual Report to the Ontario Hospital Services Commission on "The 1972 Budget," (November 19, 1971).

to-date this year has led us to have very real doubts about the operational effectiveness of departmental plans in contrast to the overall program, although, percentage gains in productivity, based on a unit-cost formula, can occur. We have reluctantly come to the conclusion that departmental plans are:

- exceedingly complex to administer.
- very time-consuming to operate.
- do not achieve dollar savings, in fact, they can cost money.
- do not appear to have significant employee motivational value."⁶⁹

V. SUMMATION

It is interesting to note that the failure of the group-type hospital plan was not evaluated in terms of why it failed, but what it had not accomplished. As in previous works on incentive formulation this question seems to be avoided and new schemes adopted to supplement the old. The problem with this approach is that the same variables are considered over and over again with the same ultimate result of abandonment or at best a change in the original purpose of the plan. The GNGH also seems to be following this road as can be seen in their budget submission to continue and further develop the E.S.P. program.⁷⁰

Although different in nature, all three programs seem to have encountered similar difficulties. There was a

⁶⁹ Ibid., p. 3.

⁷⁰ Ibid., p. 6.

lack of structural maleability which resulted in large scale program isolation. The behavioral aspects of individual and group participation were ignored, leading to program disinterest; and the technical problems of a fair, constant base and judgemental criteria of individual efforts (based on the unit value system) leading to behavioral dysfunctions, were not reconciled. In all three programs the physician was not included. Integration of these aspects is a necessity for any incentive plan to achieve maximum results. The common indicators of relative success within these programs appear to be superior management, ample control features, and the perceived distance of rewards to individual employee actions.

CHAPTER 5

PHYSICIANS AND INCENTIVES FOR CONTROLLING THE COST OF HEALTH CARE

I. INTRODUCTION

Professional staff in hospitals, namely physicians, influence or control expenditures in the practice of their profession. Formal accountability for expenditures is difficult to apply to the physician within the present reimbursement system as responsibility for the costs of health care are not related to the responsibility for advice and supply of that care.

"... medical tradition emphasizes giving the best care that is technically possible; the only legitimate and explicitly recognized constraint is the constraint of the art."⁷¹

There is little attempt made to relate the benefits of the "best care" to the costs.⁷² The physician has no need for a cost orientation as the existing reimbursement system does not provide any incentive for their consideration. The third party system has removed the patient's direct responsibility to pay and therefore the physician's consid-

⁷¹Victor R. Fuchs (ed.), Essays in the Economics of Health and Medical Care (New York: National Bureau of Economic Research, 1972), p. 66.

⁷²Ibid.

eration of payment in suggesting alternative means of treatment. When the physician orders various services for his client (i.e., length of hospitalization, level of required care, pathology, radiology and drugs), the order is made on the environmental characteristics of the facility and the patient's condition, in terms of the physician's choice. The price factor of utilization rarely plays a part in his decision.

Expenditures in the health care field without the use of cost-benefit, cost-effectiveness or even least-cost analysis are made routinely. This arises due to the ambiguity of measurement of health care benefits and the absence of reliable mechanisms which link utilization of facilities to their costs. This chapter will deal with two fundamental questions regarding the applicability of incentives for the purpose of making professional behavior in the service organization cost-sensitive:

1. What incentives can be offered to further the interest of the medical profession in the cost control of utilization?

2. What incentives can be implemented to encourage the use of para-professionals by medical practitioners?

In order to fully explore these questions, a brief summary of some of the more common reimbursement systems will be noted. Elements which may be of value in considering changes in our system will be examined along with proposed

effects on the medical profession. The Kaiser-Permanente Health Plan payment method will then be examined. This plan has received international interest by those looking for incentive schemes to deal with medical care cost escalation.⁷³ Finally, structural changes in the reimbursement system to provide incentives for least-cost utilization of services will be offered for consideration. These suggestions alleviate problems noted in the previous examination of hospital incentive systems.

II. TRADITIONAL REIMBURSEMENT SYSTEMS

A. Fee for Service

In Canada, physicians are mainly reimbursed on the fee for service basis. The fee for service structure is payment for each medical procedure. The payment is made by the third party (the provincial medical care insurance plan) directly to the physician. The patient usually pays the doctor nothing, although overbilling practices for certain procedures are not uncommon between physician and patient. In some provinces the physician bills the patient directly and the third party pays the patient rather than the

⁷³ G. Williams, Kaiser-Permanente Health Plan: Why It Works (Oakland: Kaiser Foundation, 1971).

physician.⁷⁴

The effect of the physician on the total health care dollar is significant.⁷⁵ In 1971, out of a total expenditure on personal health care in Canada of \$5,109,519,000.00, physicians' services amounted to \$1,236,182,000.00. This does not include the hospital costs nor the cost of drugs incurred by doctors in purchasing these services for their clients. Hospital expenditures for the same period were \$3,152,007,000.00 and drug costs were \$422,494,000.00.⁷⁶ If the portion of these costs which are controlled by the physician were added to the fee for service payments, it is not unlikely that the proportion of the personal health care dollar spent, directly influenced by the physician, would account for the majority of total expenditures in the health care field.

B. Salary

"Salary is a fixed amount of money scaled according to the rank of the job and paid

⁷⁴ For provincial differences in fee collections see: Health and Welfare Canada, Annual Report of the Minister of National Health and Welfare respecting operations of the Medical Care Act for the fiscal year ending March 31, 1972.

⁷⁵ For a discussion of secondary demand for services created by the physician see: J.R. Griffeth, Quantitative Techniques for Hospital Planning and Control (Toronto: D.C. Heath and Company, 1972).

⁷⁶ Health and Welfare Canada, Expenditures on Personal Health Care in Canada, 1960-1971, p. 5.

according to the time the doctor gives. Patients usually pay the doctor nothing. Some arrangements allow the doctor to collect fees from the third party, in addition to the salary given for basic care."⁷⁷

Salary does not account for a large proportion of payment to the medical profession in Canada, although the new emphasis on Community Clinics and Ambulatory Care is starting to attract more physicians on a salary basis. In the general-acute hospital, physicians on salary account for a very small percentage of total practising physicians. Medical personnel on staff account for 2.1% of the total labour force employed by general-acute hospitals.⁷⁸ These physicians are subject to most of the bureaucratic and budgetary controls as are other employees and are not to be considered in this paper as constituting the same problem within the framework of the general-acute hospital as do the fee for service practitioners.

C. Capitation

Capitation is different than salary in that it is based on a fixed annual payment for each person on a list of patients regularly assigned to a physician. The physician is responsible for the care and treatment of those patients

⁷⁷W.A. Glaser, Paying the Doctor (Baltimore: The John Hopkins Press, 1970), p. 25.

⁷⁸Health and Welfare Canada, Hospital Insurance and Diagnostic Services (Annual Report, 1971-72).

assigned to him and receives payment whether or not he sees the individual patient. If an individual patient has many medical problems the total fee still remains the same. Third party payment is most usual and the patient does not pay the practitioner on a direct basis.

Capitation in its standard form allows for greater continuity of care between doctor and patient, but does not provide for incentives to increase workload or provide a better quality of care. General practitioners are more prone to transferring patients to the care of specialists in the event of medical problems which are time consuming or involve increased effort. This reinforces the differences in task orientation between specialist and general physician by removing monetary incentives to promote the use of different or new procedures. This system has worked best where the gap (both in work and status) between the specialist who works out of a hospital, and the general practitioner based in private practice, is great; and where the general practitioner does not seek to become a specialist.⁷⁹ Capitation tends to conservative orientation and does not, in standard form, offer incentives to move from a treatment to a preventive outlook.

⁷⁹ In Germany, this phenomenon resulted in a push to abandon the capitation method and in England it resulted in revisions resembling payments to specialists.

D. Case Payments

Case payments are relatively rare and are fixed sum payments per patient treated. The payments are not itemized by procedure and totalled as in fee for service, nor are payments made on the basis of a list whether the patient is seen or not. Where this system is used it is in conjunction with the third party, service benefits methods.

E. Summation

These reimbursement systems do not, in their traditional forms, attempt to match physician spending to the cost of hospital operations. In other words, there is no physician accountability for cost generation within the hospital. The fee for service and case methods tend to encourage over-utilization of facilities, while the salary and capitation methods do not contain any mechanisms for utilization control.

III. KAISER-PERMANENTE HEALTH PLAN

"The Kaiser Foundation Medical Care Program, as it is called in its totality, represents an amalgam of professional, industrial, social, and economic methods of solving the problems of providing primary and specialized medical and hospital services of approved quality at reasonable costs to large masses of people."⁸⁰

The organization of Kaiser-Permanente (K/P) may be visual-

⁸⁰Williams, op. cit., pp. 2-3.

ized as a triangle with the physicians, consumers and hospitals at the three points and encompassing the health plan.⁸¹



The members' dues pay the expenses for the hospitals and the medical practitioners with surplus revenue (tax exempt) divided equally between the medical group and the expansion of facilities. The plan is completely self-supporting with no governmental subsidies or other financial aid.

Once the plan is established and the initial partners entrenched in their particular region or clinic within a region, the employment pattern of the physician is as follows. He is first hired as a salaried physician subject to review and increments for 1 to 3 years of practice. After this probationary period, if found acceptable, he is elected to a partnership. At this point he is placed on a monthly draw and shares in annual profits. The practitioner has no overhead costs (e.g., billing) to contend with and is guaranteed his income along with financial security and disability or retirement income.

Annual profits depend on utilization and cost

⁸¹Ibid., p. 9.

performance of facilities. The practitioner benefits directly from their efficient use. The practitioner also benefits from the use of para-professionals in utilization of out-patient services handled "in whole or part by nurses, aides, technicians, physical therapists, optometrists, or others, including history-taking, simple examinations, injections, laboratory tests, x-rays, electrocardiograms, physical therapy, eye refractions or other procedures."⁸²

The Kaiser system has run into problems since the advent of Medicare and Medicaid in the United States. As one Kaiser physician states:

"Since Medicare and Medicaid, physicians' incomes have risen sharply. I believe that we have failed to keep up. The bulk of our income is derived from the monthly dues of our health plan members and can only be increased by raising dues rates."⁸³

This adds more credence to the fact that fee for service in conjunction with an insurance scheme which divorces responsibility for costs from receipt of income, results in a socially and economically undesirable situation in distribution of the health care dollar. This may be a problem for the Kaiser system in the American Medical marketplace but is a great advantage in considering a

⁸² Ibid., p. 34.

⁸³ H. Weiner, "Organization and Responsibilities," in A. Somers (ed.), The Kaiser-Permanente Medical Care Program: A Symposium (New York: The Commonwealth Fund, 1971), p. 105.

Kaiser-type system for implementation in Canada, where the profit motive does not exist. The physician in the Kaiser system is directly affected by cost considerations and is obviously reticent to consider adding additional costs to the client. This incentive to provide service at a "reasonable" cost is what is needed in considering the implementation of any health care plan.

Some of the major economies in the Kaiser system are as follows:⁸⁴

1. The key to efficiency appears to be in the integration and coordination of hospital, medical and other health care costs into a single community-wide accounting system with definite control features.
2. The elimination of unnecessary health care, particularly hospitalization, through direct controls.
3. Kaiser hospital admissions and days of hospitalization is substantially lower than state and national rates due to their out-patient orientation. Their ratio of out-patient to in-patient in 1969 was 45 to 1, while the national rate for the same period was 4.3 to 1.

In sum, Dr. Sidney Garfield, the founding surgeon of the Medical group stated that the economic principles of the Kaiser organization reverses the usual economics of medicine:

⁸⁴These have been summarized from both Williams, op. cit., and Somers, op. cit.

the doctors are better off if our subscribers stay well and our hospitals better off if their beds are empty.

IV. SOME OTHER UTILIZATION CONTROLS

There are many theories on how to control utilization of health care facilities but few of these theories, when put into practice, have made real change in utilization patterns with regard to either facilities or staff. A good example of this is the stress put on Utilization Review Committees. In terms of the utilization of hospital facilities "the crux of the entire program is an active, properly functioning, staff-accepted utilization Committee."⁸⁵ The problem here is obvious. How can the medical staff promote any measures which would conflict with their professional orientation? Their responsibility is patient-centered, not cost-centered, as they are not affected by the costs of purchasing medical care for their patients and are paid on a fee for service basis. Consequently, they are involved in the adversary process of maximizing available resources.

The Canadian Council on Hospital Accreditation recommends an assessment or utilization committee meet

⁸⁵ Dr. J.E. McClenahan, "Applying the Results of Utilization Measurement," in Utilization of Hospital and Physician Services. Proceedings of the First Conference on Utilization in Chicago, March 2-3, 1962 (Chicago: American Hospital Association, 1963), p. 20.

monthly to:

1. review the present status of the patient in the hospital.
2. determine that each patient properly belongs within the hospital.
3. recommend a more appropriate disposition of the patient.
4. assess new applicants for admission to hospital.
5. report regularly, at least quarterly, to the medical staff and the governing body through the medical advisory committee.⁸⁶

The same problem of physician control of utilization without cost responsibility applies to the above. Perhaps the gross mismanagement of utilization procedures by a specific individual may be noticed and curtailed by such a committee but general utilization patterns cannot be expected to change through this medium. The Task Force Report and the Hunt Commission both pursue the same course. The Task Force Report recommends "... that standards be developed for the duration of hospitalization for a series of conditions... Without the development of such norms, hospital administration is severely handicapped in its effort to ensure rational

⁸⁶ Canadian Council on Hospital Accreditation, Hospital Accreditation Guide Compendium (Toronto, 1967), p. 141.

genuinely effective use of in-patients' facilities."⁸⁷ The Hunt Commission purports a more efficient use of hospital facilities through admission and discharge committees and that the Manitoba Health Services Commission "should establish guidelines with regard to acceptable length of hospital stay in each disease category and delegate responsibility for maintaining these standards to the hospitals."⁸⁸

The difficulty and the cost factors in establishing standards and acceptable boundaries of disease categories are usually underestimated, but, accepting the proposition that this can be accomplished in a meaningful way, the same problem of the ultimate responsibility for any real change being that of the medical profession, operating under our present system, does not, in the author's opinion, give rise to much hope for concrete action.⁸⁹

Various systems have been developed in different

⁸⁷ Department of National Health and Welfare, Task Force Reports on the Costs of Health Services in Canada, Vol. 2 (Ottawa: Queen's Printer for Canada, 1970), pp. 18-21.

⁸⁸ Report of the Commission of Inquiry into Hospital Admissions, John M. Hunt, Chairman (Winnipeg: Queen's Printer, March 1971), pp. 37-38.

⁸⁹ For some of the technical problems in operationalizing standards and measurement criteria see: L. Nestman, A Feasibility Study into the Development of Physician Controllable Cost System by Diagnosis by Patient (University of Alberta Hospital, 1972).

hospitals based on the same mechanisms of utilization review.⁹⁰ They all suffer from the same basic fault of avoiding the problem of the physician who "must be made to have some fiscal responsibility in making resource allocation decisions."⁹¹ There are many other methods which have been tried in order to slow the escalation of the costs of health care services, some more successful than others. These are important and valuable areas of consideration but skirt the main problem of physician responsibility for utilization of services. Under our present system, the basis for incentives is just not available be it profit or income tied motives.

"Possibly one of the greatest deterrents to a venturesome, dynamic, participation of industry is the continuing notion of the illegitimacy of the profit motive in connection with the furnishing of goods and services in the business of health. This notion may in time prove to have constituted a great tragedy for the patient, for it has considerably limited the extent to which

⁹⁰ Examples of various utilization systems are: (H.U.P.) Hospital Utilization Project in P.M. Lewis, "The Hospital Utilization Project in Pennsylvania," Medical Care 8 (July-August, 1970); Maui system in E.G.Q. Vantilburg, "How One Hospital Increased the Effectiveness of its Bed and Service Utilization," Canadian Hospital 48 (February, 1971); (MORU) Management Operations Research Unit in J.S. Fair, "A Concrete Approach to More Effective Bed Utilization," Hospital Administration in Canada 12 (July, 1970).

⁹¹ A. Somers, Hospital Regulation: The Dilemma of Public Policy (Princeton: Princeton University, 1969), p. 8.

important national resources have been applied to the problems of health."⁹²

V. CRITERIA FOR MEDICAL REIMBURSEMENT

Based on the above sections the following criteria are offered for consideration in invoking changes in the reimbursement system. The main criterion is that of insuring direct responsibility and accountability for the cost of services utilization by the professional sector who influence the level, distribution and rate of increase of these costs. It is only in this way that incentives may be formulated so that the medical profession may benefit from the efficient and effective use of patient care facilities.

Acceptance by the medical profession of the fairness and legitimacy of a proposed reimbursement scheme is necessary in order to promote the attitude of cooperation and concern for the costs of patient care. This may be accomplished by the use of incentives depending on the method of reimbursement chosen.

Under a new reimbursement scheme it is necessary to provide that the physician would receive no less (in terms of "net" benefits) than he received before the implementation of a new plan. This is not to say that income could not be

⁹²G.B. Devey, "A Model of an Organizational Structure for Health Service." Paper presented at the State University of New York, Stony Brook, December 12, 1968, p. 9 (mimeo), in Somers, ibid., p. 8.

used as a trade-off against retirement or disability insurance, or that any other alternative forms of benefits could be substituted for a physicians "net" income.

The acceptance of cost responsibility by the cost generators (the medical profession) also implies responsibility for decision-making in those areas of service which fall under this classification. If the physician is to be held responsible for related generated costs then it follows that he should be responsible for related decisions of expansion or deletion of services and facilities in this area.

A reimbursement system should also provide incentives for the physician to work in group as opposed to private practice. In this way economies of scale and efficiency of operations would be fostered by peer participation. Communication would more likely than not lead to a higher quality of medical care through the availability of specialists and the employment of para-medics for time consuming and routine procedures where a physicians' skill is not required. This labour-labour substitution would benefit (a) the physician by freeing him to utilize his training, (b) the para-medic by offering job opportunity, and (c) the patient, by offering services in a more efficient (least-cost) manner.

VI. SUGGESTIONS TOWARD A TOTAL HEALTH CARE SYSTEM

A. Hospital System

In trying to suggest the direction which a total health care system should take, prime concerns are the necessity of built-in incentives to foster efficient and effective use of existing facilities, and the provision of the highest quality of patient care given the allocation of limited resources. New incentives, both financial and others, are constantly being considered in the fight to obtain maximum return in health for each dollar spent. The present reimbursement system to physicians and to hospitals does not have built-in incentives to reduce costs in any meaningful way. The fee for service for physicians and the present reimbursement methods serve as a hospital budget mechanism for disincentives in many respects, encouraging quantity increases in utilization regardless of quality or effectiveness. The method of reimbursement for both health care facilities and physicians which seems to provide mechanisms for positive incentive utilization is that of capitation.

"Per capita reimbursement is designed to eliminate these reimbursement disincentives. The capitation reimbursement method would not work against most of the activities that hospitals might undertake in order to increase their effectiveness, and many activities that would result in loss of income under unit-of-service reimbursement

would result in welcome reduction of expenses under capitation."⁹³

Depending on the specific capitation-reimbursement plan to be evolved, there should be no interference with the patients freedom of choice of physician or hospital and no financial risk to the hospital because of the implementation of the plan. At worst, the hospital would retain the status-quo but this plan would result in incentive formulation to improve efficiency and effectiveness. A capitation-reimbursement scheme may be constructed for either/or health care facilities and the medical practitioner. The following mechanics and possible effects of a hospital plan are adopted and modified from R.M. Sigmond's article "Capitation as a Method of Reimbursement to Hospitals in a Multihospital Area."⁹⁴

Under our system of health service registration the simplest way to provide a base for per capita payments is to assign the registrants or beneficiaries of service to the hospital which services that surrounding community. Another way is to allow the beneficiaries of service to choose the

⁹³ R.M. Sigmond, "Capitation as a Method of Reimbursement to Hospitals in a Multihospital Area," in U.S. Department of Health, Education, and Welfare, Reimbursement Incentives for Hospital and Medical Care: Objectives and Alternatives (Washington: Government Printing Office, 1968), Research Report No. 26, p. 49.

⁹⁴ Ibid., pp. 52-59.

hospital (by questionnaire) which they would prefer and assign the registration to that hospital. Either way it would be made clear that the patient still has the choice to use the hospital of his preference. The hospital would retain the file of its beneficiaries which would be updated annually and changed as an individual requested.

The hospital would receive a monthly payment based on the number of beneficiaries on file, whether treated or not. The per capita sum is the same for all hospitals and is based on actual costs incurred by the hospitals in providing care.⁹⁵ Therefore, there is no need for a claim submission by a hospital for one of its own service recipients. When a non-beneficiary of a hospital uses the services the billing is sent to the intermediary (the Hospital Commission) and receives payment which is deducted from the hospital at which the patient is registered. Statistical reports and costs of service are submitted on a regular basis for budget review. If a hospital has received more funds (has made a gain) then only half that gain (or other mutually agreed upon sum for all hospitals) would be returned to the Commission. Therefore, having nothing to lose and everything to gain by efficiency of service, the effectiveness of a

⁹⁵ Special purpose hospitals would be handled differently with pre-determined adjustments made to account for services rendered. The intent here is to give the same per capita payment to general-acute hospitals to achieve equitable treatment across regions.

hospital should also tend to increase by offering more needed programs and effective services to attract physician referrals and public acceptance of the hospital as an identification base. This would, in turn, increase its per capita payments. If a hospital does not cover its costs, this may be adjusted by means of a global budget review.

Spill-overs of this system would have an influence in many other areas. Economic incentives for shorter lengths of stay, ambulatory care, home care and transfer to extended care facilities are all economically feasible under this method of reimbursement as are programs to reduce unnecessary utilization of services and to convert in-patient facilities to house more needed services.⁹⁶

"If the more expensive of equally effective alternatives is selected, it is clearly a waste of the institution's funds. Any expenditure of hospital funds that does not contribute to the health or satisfaction of the patients is also clearly a waste of the institution's funds."⁹⁷

Coordination among hospitals may also be increased by the method of capitation. Hospitals with costly and highly specialized equipment will want to capitalize on utilization and will seek arrangements with other hospitals for referrals. The smaller hospitals without this sophisticated

⁹⁶ This implies the necessity of federal-provincial cost-sharing agreements for these programs.

⁹⁷ Ibid., p. 55.

equipment will be willing to refer its clientele to the larger hospital at less cost, thus avoiding duplication of services. The large hospital would become a referral hospital for other hospitals which would gravitate to a community hospital orientation. Hospital-patient relationships under this system would be much closer and programs, both preventive and treatment, would be directed at specific population groups. This would make program evaluation a more feasible vehicle and identification, assessment and consideration of alternatives could be undertaken in approaching delivery and provision of health care. This brief discussion should be sufficient to provide some insight into the possible benefits of a capitation system of hospital reimbursement.

B. Medical System

A capitation reimbursement plan for the medical profession is a difficult but ultimately beneficial system to contemplate. Regardless of the incentives offered for efficient and effective utilization of services, the fee for service basis of payment provides disincentives which counteract major possible gains. A modified capitation scheme which would tie the physician to the generated costs of service utilization would contain the incentive necessary to control these costs.

"The economic rationale for this approach is the following: In a non-medical market, the consumer, in making purchases, is cognizant

of the alternatives and of their costs and benefits. Thus he spends his money in such a way as to maximize his satisfaction for any given expenditure. For the medical care market, however, a great deal of technical knowledge is required in providing the care for a given diagnosis and even in ascertaining the correct diagnosis. The patient therefore selects a physician who knows his needs as a patient and his resources and who can then choose the inputs such as hospital care and his own care, that are necessary in providing medical care for the patient. The physician is analogous to a firm combining the inputs for producing a final product -- in this case, medical care."⁹⁸

The financial incentive to the medical profession would be based on the criteria discussed previously in this chapter. Given the basic mechanics as similar to those suggested in the method of capitation for the hospital in the previous section, a closer look at incentives which may result is offered.

The capitation payment to the physician would be based on total medical care costs to the subscriber. This amount would be made up of the total expenditures by the government on both medical and hospital services less the amount allocated to the hospitals. Given a hospital district, region or other predetermined geographic area,

⁹⁸ P.J. Feldstein, "A Proposal for Capitation Reimbursement to Medical Groups for Total Medical Care," in U.S. Department of Health, Education, and Welfare, Reimbursement Incentives for Hospital and Medical Care: Objectives and Alternatives (Washington: Government Printing Office, 1968), Research Report No. 26, p. 63.

the total payment to the hospital plus the payment to the medical profession would be the fund allocation base. If the hospital underspent its allocation, the surplus would be divided between the medical staff in the form of bonuses, and the hospital in the form of funds for improving services or facilities. This implies the distribution of funds by the medical association, regional medical body, or existing medical staff within a hospital, based on medical criteria and standardized for the province.⁹⁹ Three examples are offered for clarification of the systems' operations. These examples are based on a total budget (per capita payment) of \$100.00. The medical staff's share (per capita payment base) is \$50.00.

Example #1: Hospital spends \$50.00 -- medical staff receives \$50.00.

Explanation: The medical staff has received its per capita guarantee and the hospital has used its funds to supply services and maintain equipment.

Example #2: Hospital spends \$60.00 -- medical staff receives \$50.00.

Explanation: Theoretically, the medical staff should only have received \$40.00 to balance the total

⁹⁹ At whatever level this system was introduced, be it provincial or regional, this implies specific physician responsibility and accountability for overall health care expenditures.

budget. But, because of the per capita payment guarantee they receive the full \$50.00. This leaves the hospital little choice but to become more efficient very quickly. In fact, the government may force the hospital and medical staff to operate on \$90.00 the following year and advise the medical staff that their guarantee has dropped to \$45.00 until the loss is recovered; or the hospital may be forced to borrow or cut back on programs. This in turn may lead to loss of medical support and eventually (if the hospital and medical staff do not work together to improve the situation) loss of public support in the form of changing their identification base. This would result in a lower per capita payment and eventually the phasing out of the hospital.

Example #3: Hospital spends \$40.00 -- medical staff receives \$50.00, plus utilization bonus \$5.00. Total funds received, \$55.00.

Explanation: By efficient utilization and proper program planning the hospital has made a profit. The medical staff receives a portion of the money and the hospital receives the balance. With this extra money the hospital may expand

services or improve existing programs thereby being able to attract more people for registration and increasing the total per capita payment. This should be an ongoing incentive to supply both efficient and effective services to the public at large.

The physician then stands to increase his "net" benefits in two ways, by lowering the utilization of costs in the hospital so that the portion of revenue to the medical profession is higher, and by lowering the hospital costs (at the hospital he is associated with) in order to share in the "profit" of efficient hospital utilization. The profit-sharing formula is to be mutually agreed upon by all hospitals and practitioners, and then standardized for the province. Inherent in this capitation reimbursement system is a move to facilitate efficient use of facilities. Duplication of facilities would be avoided and least-cost policies for equipment and for hospital expenditures could be planned on a regional demand basis. Hospitals would be chosen by physicians on the criteria of efficiency and effectiveness in providing services for his patient.

"The physician is the most knowledgeable consumer in the market, and he would be able to select the hospital with the necessary level of quality and available services at the lowest possible cost."¹⁰⁰

¹⁰⁰ Ibid., p. 64.

The increased use of para-medical personnel and an increase in the supply of physician services are also expected as noted in the Kaiser system discussed previously. Preventive care is still another spill-over effect of a capitation reimbursement plan for the medical profession. The use of multiphasic screening and computers for record maintenance become more feasible in hospitals and large medical groups and ongoing quality review of peers and accreditation a necessity to retain acceptance and clientele. The client still has the choice of physician and hospital. A more thorough examination of the concept of a capitation reimbursement plan for both medical and hospital systems may indicate an acceptable compromise between controlling the escalation of health care costs and the needs of the medical profession.

In any examination of capitation systems, the Kaiser-Permanente system should be considered as a high priority. Aspects of this system seem particularly compatible with our present medical care system and Kaiser experiences may prove to be invaluable in considering various alternatives. For instance, if the Alberta Hospital Commission and the Alberta Health Care Insurance Commission were amalgamated, there would be less duplication of tasks, lower administrative costs and an organizational structure not dissimilar to that of the Kaiser plans.

VII. SUMMATION

The review of the various reimbursement systems, utilization controls, the Kaiser-Permanente Health Plan and the subsequent criteria for medical reimbursement was undertaken in order to include the professional sector in the search for incentives to foster efficient and effective health care services. The question of incentives is not just a theoretical issue but must be dealt with in practical terms. The preceding examination of the Kaiser-Permanente system has shown that incentive programs to control utilization, and therefore costs, can be, and has been, successfully implemented. It is not practical to consider incentive projects which do not allow the major comptrollers of costs, the physicians, to participate and benefit from the implementation of incentives. For this reason the above suggestions regarding a total health care system contains a shift in the reimbursement system to a modified capitation system which has proven to be successful. The above proposal takes in the problems previously delineated and accounts for the difficulties associated with behavioral motivations and structural rigidities (such as impersonality and participant accountability). The per capita base is fair and calculated on actual expenditures thereby avoiding arbitrary and decreasing standards. The changes suggested are not radical and great care has been taken to devise a system which would initially encompass existing systems

(e.g., medical staff organizations), minimizing anticipated resistance by upholders of the status quo. The following chapter presents an application of the incentive criteria developed in this thesis to a topical health care plan.

CHAPTER 6

INCENTIVES AND THE HASTINGS REPORT

I. INTRODUCTION

The preceding examination of incentives, motivational behavior from a bureaucratic and professional standpoint, and the review of selected hospital incentive programs may be summarized as follows:

1. The implementation of incentive programs within a health care organization depend on, and are influenced by, the level of bureaucratization. This implies that structural manipulation of bureaucratic characteristics is an essential parameter in altering worker behavior.
2. The relative success of incentive programs depends upon the degree that organizational participants accept accountability for both the benefits and burdens (in the form of incentives-disincentives) accruing out of their respective actions in executing organizational tasks.
3. The participation in incentive plans depends on the immediacy of personal rewards or penalties to the worker's behavior arising out of task execution.
4. Qualified management personnel is vital to the successful execution of incentive programs.

For the purpose of this chapter, the foregoing serve as criterion variables to the analysis of The Community

Health Centre in Canada (The Hastings Report). A fundamental belief of the author is that these criteria are critical to the formulation and implementation of programs in the health care field, and that avoidance of their consideration may result in less than optimal success. The focus of this analysis is on examining the possible effects of each specific criterion and on applying them to a project proposal receiving serious attention as to implementation. It is hoped that this exercise may serve as a guide to the avoidance of future problems and as an aid to more effective implementation of incentive programs.

II. THE HASTINGS REPORT

This report was undertaken due to growing governmental concern about the acceleration of health care costs and the belief that alternatives to in-patient care must be considered. The focus is on community health centres as the first step toward a reorganization of the total health services system.

The implications of community health centres as proposed by the committee cover a broad spectrum, some of which are not directly relevant to the focus of this study. Only those aspects which are considered of direct consequence will be noted. The report summary and recommendations pertaining to the health centre are contained in Appendix

I.¹⁰¹ The second major section of this report deals with the health services system and is an extension of the community health centre on a macro level. It is not considered to directly pertain to the objectives of this study but the summary and subsequent recommendations are contained in Appendix II.¹⁰²

The definition of a community health centre is given as:

"... a facility or intimately linked group of facilities, enabling individuals and families to obtain initial and continuing health care of high quality. Such care must be provided in an acceptable manner through a team of health professionals and other personnel working in an accessible and well-managed setting. The community health centre must form a part of a responsive and accountable health services system. In turn, the health services must be closely and effectively co-ordinated with the social and related services to help individuals, families, and communities deal with the many-sided problems of living."¹⁰³

The emphasis of the centres are on high quality, initial and continuing care regarding individual and family health care needs. The areas to be covered are health promotion and prevention, diagnosis and treatment, and rehabilitation. This may be accomplished through counselling, education,

¹⁰¹ Canada, op. cit., pp. 33-35.

¹⁰² Ibid., pp. 56-59.

¹⁰³ Ibid., p. 1.

planning and specific programs along with reception and referral, diagnosis and treatment, and supervision. It is a combination of social services, health care professionals, para-professionals and others.

"In short, the community health centre can only be effective if it is a mutually acceptable partnership of the members of the community and the members of the health care team."¹⁰⁴

The team approach is offered as the key element whereby the use of professional time and skills may be apportioned in a least-cost manner through labour-labour substitution. Dental service units, social work units and the standard medical specialties are included in this team approach as the size of the centre and the need for services are realized. An upper limit in size for a centre is offered as twelve general practitioners or a total of twenty physicians including specialists. Services offered by the centre would depend on the need in a specific area and may encompass societal diseases now handled by other agencies.

"In all cases, an efficient communication and records exchange system within the health services system in an area is essential."¹⁰⁵

The need for efficient management in terms of professional administration is noted. The use of in-service beds (other

¹⁰⁴ Ibid., p. 2.

¹⁰⁵ Ibid., p. 7.

than holding beds for transfer of patients to hospitals) is discouraged as competing with hospitals. Then as a partial contradiction, programs which promote an integration of health and health related services, including minor surgery and use of in-service facilities are applauded as a possible long run goal. This, in effect, is duplicating in-hospital services already being utilized.

The reasons for the community health centre, as stated by this report, are economic, social, political and organizational. The economic reasons revolve around reducing hospital in-patient use and ultimately the reduction of hospital beds. By implementing a different organizational structure it is felt that productivity and effectiveness will be increased. The rationale offered shows:

1. In organized and supervised settings, a team of various types of personnel, each member of which carries out specific functions, definitely increases the efficiency and productivity of the physician, dentist, and other professional personnel as compared to situations of solo and largely unsupported forms of practice.

2. It is also definitely possible to substitute less highly trained professional and technological personnel for more skilled personnel in organized and supervised settings, without any danger to public safety or diminution in quality of health care. This is also true in situations where only limited supervision is possible, such as the north,

provided back-up and referral services are reasonably available.¹⁰⁶

Other economies mentioned are applicable to every health care organization and are not unique to this particular concept.

Social, political and organizational reasons are based on the premise that the availability of better health care may not be accelerating as are the costs of providing these services. The individual is concerned with personal availability and utilization of services rather than any general concepts of health care. The health professionals are concerned with the dominance of physicians in the general area of health, where other professions may be more knowledgeable and have superior skills in performing services which are not strictly medical in nature. The government is concerned with cost, and the policies which define financing arrangements at both the federal and provincial levels. The report states that the government must assume an effective leadership role in coordinating services rather than just continuing to pay the bills.

One of the important implications of the community health centre is the legal aspect. This concept requires "corporate" or collective responsibility for employees regardless of their task orientation. This collective responsibility of the corporation removes the onus from any

¹⁰⁶Ibid., p. 16.

one person, and places it on the corporate structure, therefore validating contracts of service with individual patients and the health care team members. Certification of competence is also necessary but the present licensing regulations of various groups would have to be reviewed and modified to foster a flexible team effort.

The Provincial government should be responsible for policies pertaining to personnel and staffing requirements, payment methods and benefits and incentives for these service entities. Actual internal deployment, hiring and firing, should be the centre's administrative concern. A regional or district administrative level is proposed in order to control the utilization of more expensive specialties.

"Specialized personnel serving more than one community health centre should be employed by the area of district administrative level and subcontracted to the centres."¹⁰⁷

The payment of health personnel consists of either salary, sessional reimbursement, or a pooled-income approach. The present fee for service system is felt to be incompatible with community health centre objectives. The incentives proposed by the committee under the rubric of tangible benefits are adequate and competitive reimbursement, recognition for training, work load and continuing edu-

¹⁰⁷ Ibid., p. 25.

cation. Standards and ranges for normal variation in practice patterns along with monitoring techniques must be developed so both the public's and the health services professionals' interests may be served.

Incentives for health personnel revolve around "psychological and professional rewards inherent in the challenge of working with others in an innovative team which functions in a responsive and accountable partnership with the community being served."¹⁰⁸ Other incentives mentioned are those commonly offered as part of most middle and upper management contracts, such as salary increments, pensions and insurance and guaranteed holidays. Added monetary incentives are offered for isolated hiring areas and should also be available for achievement of community centre objectives. The integration of existing private health care facilities through outright purchase is also considered.

Funding of community health centres should be a provincial responsibility and a global budget used, based on population and nature and scope of services. Capital funding may be handled by provincial grants, low interest loans, or by utilizing private capital sources on a lease-back basis. This latter proposition would free government funds for alternate allocation.

The importance of physical design is noted in the

¹⁰⁸ Ibid., p. 27.

report but only vague general conclusions are offered (see Appendix III).¹⁰⁹ Continuing education of health personnel and re-education programs are vital to the community health centre concept. The emphasis should be "patient-centered" and on "problem-solving" integrated with social services and the public. Active learning experience within the health centre as basic preparation for advanced education is desirable and care must be taken not to alter the centre concept to encompass "ideal" patterns of health care, thereby destroying the real service setting and losing community participation. These are the main concepts dealt with in The Hastings Report.

III. THE ROLE OF STRUCTURAL MODIFICATION

A. Possible Effects

Modification of an organizational structure may serve as an incentive in itself, or as a base to foster incentive utilization. The conclusions derived in Chapter 3 of this study indicate that the size of an organization may enhance or hinder such variables as cooperation, cohesion and integration of personnel in the achievement of specific objectives due to the conflict between internal organizational goals (to survive and broaden the power base) and the intended purpose of the organization (to fulfill a

¹⁰⁹ Ibid., pp. 30-31.

community or social need).

An organization and its scope of activity should be limited to a predetermined manageable size where optimum efficiency and effectiveness in maximizing its intended purposes may be enhanced. When the natural growth begins to contribute to problems in the delivery of service or administration, an alternate structure or department should be implemented to encompass components of the original structure which can no longer be effectively handled by means of the original vehicle. In this way, duplication of services in the same geographic area may be avoided and the original concept may be utilized in different regions. These smaller, relatively autonomous organizations would be better equipped to deal with organizational problems through more personalized contact and a closer, more meaningfully defined set of objectives.

In the context of controlled size, specialization could be used to greater advantage. The problems of impersonality and the negative effects of a hierarchy with its rules and formality minimized. The knowledge of organizational structure may be a valuable aid in considering the implementation of a new program or in considering incentives within an ongoing enterprise.

B. Consideration by The Hastings Report

The structural components of the community health centre are dealt with in the report. The stress placed on

an upper limit in size refers to the number of physicians employed. The emphasis is on the team concept and the understanding is that further units (teams) are added as population needs are realized. In this way it is felt that cooperation, personal service, and proper communication may be maintained. Problems which arise between teams are not considered and just who is the head of a team is only clarified to the extent that the physician should not be the team leader.

The structure of the team is considered as an equal partnership of all those professionals, para-professionals and others who deal with the patient. The hierarchy of authority, rules and formality are not considered nor is the size and layout of the physical plant. The report states which positions should be created but not the relative importance they hold nor the relative responsibility they assume.

IV. PARTICIPANT ACCOUNTABILITY

A. Possible Effects

The importance of participant accountability in achieving specific objectives is noted in previous chapters of this thesis. This accountability implies that the participant must be held accountable for his actions or incentive implementation will be, at best, effective only as a temporary measure.

If there is an absence of control over the actions of a participant the acceptance of an incentive or reward may be problematic. Conversely, if the participant accepts the incentive or reward system offered, and a penalty or burden is attached for not reaching or maintaining specific objectives, then over a period of time, this incentive becomes expected as part of job definition and the refusal to conform may result in a predetermined negative sanction. At this point, organizational objectives have been fulfilled and the incentive has reached an equilibrium where its consideration ceases to be beneficial. Other incentives with both benefits and burdens attached may be offered for other specific objectives once this equilibrium or neutralization process has occurred.

One of the most obvious examples in the health field, of offering incentives without attaching burdens or penalties is the attempt by hospitals to control physician utilization of facilities. The fee for service reimbursement system has been blamed for the failure to control escalating costs, but this may not be at the root of the problem. The incentive of fee for service has no provision for utilization accountability or control. Therefore, overutilization of facilities may further benefit the physician or, at the minimum, not be of valid personal concern. In order to reconcile this difficulty, two approaches may be considered: that of changing the reimbursement system to

one which does not contain incentives for over-utilization of facilities and/or to add accountability mechanisms which would apply penalties or burdens for this utilization. This would result in direct responsibility for actions taken by the participant in providing health care services.

B. Consideration by The Hastings Report

The community health centre is concerned with the sharing of responsibility by all the team members. While this concept of corporate responsibility may "foster flexibility and diversity in the provision of care"¹¹⁰ it may also cloud the issue of individual accountability for care and treatment. The team leader (regardless of which individual is chosen) is seen more as a chairman of a committee than as a leader with the authority, responsibility and accountability which is implied by the use of the word.

The reimbursement of participants by salary is promoted in the report. This does not ensure responsibility or accountability any more than it does in any other industry unless it is combined with a predetermined formula for monitoring ongoing evaluation and review. This is emphasized in the report, but may work to the detriment of the team concept unless organized and controlled in a structured hierarchy of authority. This is implied in the

¹¹⁰ Ibid., p. 23.

establishment of a district administrative level but is removed from the daily operations of the centre.

Other control mechanisms are offered in a very low keyed form as further possibilities which might be considered. The removal of present incentives to physicians and dentists for over-utilization of facilities might be combated by the institution of charges for this use or by limiting the numbers and kinds of professionals in an area to be covered by public funding mechanisms. These suggestions are made in isolation of the community centre concept and after the statements no follow-up is offered.

V. THE RELATIONSHIP BETWEEN ORGANIZATIONAL TASKS AND REWARDS

A. Possible Effects

It has been shown previously in this study that the closer the reward to the task performed the more effective is the incentive toward the achievement of specific objectives. If an individual cannot relate his specific task to the receipt of benefits in some real way, the benefits offered may prove ineffectual in motivating behavior. This need to see the positive results of applied effort is a powerful stimulus in working within an organizational setting. It may take precedence over organizational goals and additional monetary incentives. Particularly in dealing with professional groups and professionals within groups, this concept of professional achievement, pride and

ego may be a valuable asset to be directed to promote specific goals of patient satisfaction and the maintenance of an effective health care organization.

Where the relationships between effort and reward are not apparent to individual perception, then personal and individual self-interest may dominate within an organization. The raison d'etre may become the utilization of health services facilities only to foster personal gratification. The involvement in the organization of all professionals requires prior considerations of status, and these considerations must be well-defined and obvious to all those involved. Recognition in these terms must be made available for "a job well done" in order for the organization to thrive and achieve and maintain its objectives.

B. Consideration by The Hastings Report

The report does consider the relationship between tasks and rewards but only in terms of vague psychological benefits of team interaction and the use of monetary incentives for goals which are extremely difficult to define and almost impossible to evaluate.

"Incentive payments should be made to encourage the achievement of desirable objectives for these new centres, such as keeping people out of inappropriate use of hospitals, limiting to essentials the use of investigative procedures, encouraging consultancy of experts, and promoting health educational activities. These incentive payments should be determined by comparisons of practice profiles with provincial norms

and by other evaluation procedures."¹¹¹

The team concept as visualized in the report offers a multidisciplinary approach to health care which will promote innovative uses of a broader spectrum of care.

"Community health centres must involve individuals more fully¹¹² in decisions about service provision as well as in personal and family health care."

In an ideal situation this is an admirable goal which may result in better health care; but given the reality of interprofessional group behavior, the negative aspects of group decision-making coupled with a non-medical professional team leader, indicate that considerable difficulty may occur within the work situation. Individual rewards are subordinated to group rewards and individual status considerations are subordinated to team status. The original individual achievement motivation which is so ~~common~~ and perhaps necessary in completing the requirements of a professional discipline is ignored. The term status and the hierarchy it implies is non-existent in the report and the relationship between organizational tasks and rewards is limited to the above considerations.

¹¹¹ Ibid., p. 28.

¹¹² Author's underline.

VI. THE ROLE OF MANAGEMENT

A. Possible Effects

The importance of the management role is made explicit in all programs reviewed in this study and is the one aspect contained in all projects showing varying degrees of success. In the cases where management was not felt to be of the calibre demanded by the requisite functions of a proposed program the utilization of industrial engineers as a proxy for internal management was successfully implemented. An efficient organization is needed for an incentive program proposal to be successfully undertaken, but incentive implementation may not make an organization efficient or effective. Good management is imperative in program implementation.

B. Consideration by The Hastings Report

The report notes that "the actual employment and discharge of personnel and their internal deployment should rest with the community health centre administration."¹¹³ The importance of professionally trained administrators and the need for educational programs for management personnel are also considered. The emphasis placed on the role of management may be summed up by the following quotation from the report:

¹¹³ Ibid., p. 25.

"Efficient techniques of management must be employed both to support the professional operation of the health services team and to ensure courteous and prompt care for the public. A professional administrator is necessary for good relations with the public, linkage with the health services administration, and handling problems of case management. He must assure the records and communications system is used for purposes of audit, evaluation and referral."¹¹⁴

VII. OBSERVATIONS

In terms of the basic criteria utilized to analyze The Hastings Report the following observations were noted:

1. The capability of structural manipulation to promote the objectives of the community centre was not considered in the report. Plant size and layout were not discussed and hierarchy of authority, rules and formality ignored in favor of dependency on a highly informal multidisciplinary team orientation.
2. The acceptance of participant accountability for both benefits and burdens of task execution are considered by the report in a group context, thereby dissipating effective individual accountability.
3. The perceived distance and therefore the association between the execution of tasks and their respective personal rewards or penalties are subordinated

¹¹⁴ Ibid., pp. 7-8.

and rendered ineffectual due to the emphasis placed on the team concept.

4. The utilization of qualified management personnel is recognized and promoted by the report.

Based on the above considerations it appears that The Hastings Report does not contain the incentives necessary to effect efficiencies in the delivery of health care services. The report is a document pertaining to a general concept. Given the differences in priorities of the various governing bodies who will consider the concept, operationalization of a community health centre may take different forms. Many of the forms may incorporate these incentive criteria without seriously altering the multidisciplinary approach to out-patient services.

The emphasis on total equality of team members may not prove to be feasible for a number of political, social, economic or organizational reasons. Therefore, alternatives or variations may occur to change the proposed structure of the team concept without seriously affecting the general concept of the comprehensive health care centre.

The establishment of community health centres may meet the needs of society in terms of health care services or they may create a demand by their very existence. The rationale for the centres as a means of de-escalating the rate of increase in the cost of health services is not satisfactorily explained. Duplication of some services with

those of the general-acute hospital are unavoidable and the establishment of new health care facilities must increase aggregate health services cost. Perhaps the community clinic concept should be considered as an extension of community based hospital out-patient services. In this manner a direct relationship between the centre activities and a reduction in general-acute beds may be formulated and controlled through a total budget mechanism. This may also curtail the expense of new facilities, especially where part of the problem seems to be an excess of present in-patient facilities which might be converted for clinic use.

Finally, the utilization of the existing administrative expertise and the sharing of accounting and communication systems may prove to be an efficient and effective medium in which to establish the community health centre concept.

CHAPTER 7

CONCLUSIONS

I. INCENTIVE IMPLEMENTATION

There are factors of incentive implementation which are seen as positive throughout the literature. One of these is superior management and another is the distance of the reward (incentive) from the initiator of action. The closer the reward and the sooner the payoff to the individual employee the more effective it becomes. The rationale for this conclusion in the author's view, is that the action or actions which bring the reward may become a part of the individual behavior pattern on the job. When this occurs, avoidance of this aspect of the resulting job definition brings burdens instead of benefits to the employee. Therefore, in time it is not a matter of complex group relations or loyalty to the organization, but simply a part of expected task fulfillment for which he is being reimbursed. At this point the purpose of the incentive has been fulfilled and is no longer needed. A state of equilibrium has been reached. Further incentives for further objectives may then be contemplated.

This may appear as an over-simplification of a series of complex problems, but in reality may be the focus which is missing in incentive formulations. Whether the area of

concern is the Laundry department or the over-utilization of hospital facilities by the physician, the same basic principles apply. In the case of the Laundry, the employee is offered a reward to change his behavior pattern. If this reward is not considered suitable at any time and for any number of reasons, there is no incentive for the employee to alter his behavior. He does not have anything to lose by retaining the status-quo and the reward may or may not be appealing given the existing situation and the effect of time.

The case of the physician is similar. Under the fee for service system, incentives to control utilization of facilities are in competition with the physician's own professional incentives to provide "quality care" and also to increase his own net benefits. In the hospital this is done by over, rather than under, utilization of facilities. An incentive system which offers rewards for utilization control cannot be effective if there is no cost or burden attached to the plan. Utilization review committees are examples of such programs. Before incentives can be formulated a burden for not changing behavior in this regard must be an integral part of the plan. In conclusion, serious consideration and review of the effect of accountability in terms of both benefits and burdens to the participant is needed before hospitals embark on further incentive scheme formulations.

II. INCENTIVE CONCEPTS

The concept of incentives permeates the thinking of our modern industrial society. This concept takes many forms and is considered under many different pseudonyms, but the concern for behavior patterns and modification of that behavior to achieve specific goals are of utmost importance. It has been suggested that due to the failure of incentives (e.g., fee for service, etc.) to economize and rationalize the health care system, they are not applicable. Contrary to this view, it would appear that this is precisely where future incentives may be of most benefit, as an aid in achieving effective and efficient health care.

III. INCENTIVE RECOMMENDATIONS

The objectives of this study were to try and determine whether incentive formulation has a practical use in the health care field. The subsequent examination of structural aspects; the review of the concept of incentives and programs implemented in hospitals; the contradiction between physician and health care incentives; and, the formulation of criteria for examining program proposals indicates not only practical applicability, but suggests necessary utilization.

It is recommended that the following criteria, developed throughout this thesis, be considered before the implementation of any health care program.

1. That the organizational structure contain mechanisms which will allow for bureaucratic adjustment and change to help create positive changes in worker behavior,

2. That all participants in the program be held accountable for the results of their actions in executing program tasks,

3. That program participation be characterized by the immediacy of rewards or penalties to job responsibility, and

4. That the use of qualified management personnel be mandatory in the implementation and operation of the program.

If these criteria are adhered to, the success of efficient and effective health care services will be greatly enhanced. It is also recommended that the present hospital and medical reimbursement systems be examined and serious consideration be given to amalgamation in order to consolidate the information base needed for a system whereby all participants (including the medical profession) are held responsible and accountable for the generation of total health care costs. In conclusion, this thesis emphasizes the need for an interdisciplinary approach to successfully develop and implement health care programs. Incentives research, particularly in Canada, is sparse and ill-defined. It is hoped that this study may incite further interest in health care incentives and help foster additional theoretical and applied research in this area.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Adams, J. Stacey, "Toward an Understanding of Inequity," Journal of Abnormal and Social Psychology 67 (1963).
- Aiken, Michael and Hage, Jerald, "Organizational Alienation: A Comparative Analysis," American Sociological Review 31 (June, 1966).
- Altman, Isidore, "Some Factors Affecting Hospital Length of Stay," Hospitals, Journal of the American Hospital Association 39 (July 16, 1965).
- Andersen, Ronald and Hull, John T., "Hospital Utilization and Cost Trends in Canada and the United States," Medical Care 7 (November-December, 1969).
- Bandura, A. and Walters, R., Social Learning and Personality Development (New York: Holt, Rinehart and Winston, Inc., 1963).
- Beach, Dale S., Personnel: The Management of People at Work (New York: MacMillan Company, 1965).
- Blau, P.M. and Scott, W.R., Formal Organizations (San Francisco: Chandler Publishing Company, 1972).
- Blaumer, R., Alienation and Freedom (Chicago: University of Chicago Press, 1964).
- Brown, J.A.C., The Social Psychology of Industry, Penguin Books (Great Britain: C. Nicholls & Company Ltd., 1954).
- Brown, W., Exploration in Management (New York: John Wiley and Sons, Inc., 1960).
- Canada, "The Hastings Report," Report of the Community Health Centre Project to the Conference of Health Ministers (Ottawa: Queen's Printer, 1970).
- Canadian Council on Hospital Accreditation, Hospital Accreditation Guide Compendium (Toronto, 1967).
- Dalton, G.W. and Lawrence, P.R., Motivation and Control in Organizations (Ontario: Irwin-Dorsey Ltd., 1971).

- Dalton, G.W., Lawrence, P.R. and Greiner, L.E. (eds.), Organizational Change and Development (Ontario: Irwin-Dorsey Ltd., 1970).
- Dalton, G.W., Lawrence, P.R. and Lorsch, J.W. (eds.), Organizational Structure and Design (Ontario: Irwin-Dorsey Ltd., 1970).
- Department of National Health and Welfare, Task Force Reports on the Cost of Health Services in Canada, Vol. 2 (Ottawa: Queen's Printer for Canada, 1970).
- Etzioni, A., Modern Organizations (New Jersey: Prentice-Hall, Inc., 1964).
- Fair, J.S., "A Concrete Approach to More Effective Bed Utilization," Hospital Administration in Canada (July, 1970).
- Feldstein, P.J., "A Proposal for Capitation Reimbursement to Medical Groups for Total Medical Care," in U.S. Department of Health, Education, and Welfare, Reimbursement Incentives for Hospital and Medical Care: Objectives and Alternatives (Washington: Government Printing Office, 1968), Research Report No. 26.
- French, Wendall L., The Personnel Management Process: Human Resources Administration (New York: Houghton Mifflin Company, 1964).
- Fuchs, V.R. (ed.), Essays in the Economics of Health and Medical Care (New York: National Bureau of Economic Research, 1972).
- Garfield, Sidney R., "The Delivery of Medical Care," Scientific American 222 (April, 1970).
- Gellerman, Saul W., Motivation and Productivity (Vail-Ballan Press, Inc., for the American Management Association, 1963).
- Gerth, Hans and Mills, C. Wright, "From Max Weber," (New York: Oxford University Press, 1951).
- Glaser, W.A., Paying the Doctor (Baltimore: The John Hopkins Press, 1970).
- GNCH, The Greater Niagara General Hospital, Productivity . . Incentive's Report: One Year's Results (February 8, 1971).

- GNCH, The Greater Niagara General Hospital, Fifth Annual Report to the Ontario Hospital Services Commission on "The 1972 Budget" (November 19, 1971).
- Goffman, Erving, "Characteristics of Total Institutions," Walter Reed Army Institute of Research, Symposium on Preventive and Social Psychiatry (Washington, D.C.: U.S. Government Printing Office, 1957).
- Griffeth, J.R., Quantitative Techniques for Hospital Planning and Control (Toronto: D.C. Heath and Company, 1972).
- _____, Taking the Hospital to the Patient: Home Care for the Small Community (Battle Creek, Michigan: W.K. Kellogg Foundation, 1966).
- Gross, Edward, "Incentives and the Structure of Organizational Work Motivation," Hospital Administration 16 (Summer, 1971).
- Halleck, S.J., "The Impact of Professional Dishonesty on Behavior of Disturbed Adolescents," in Stratton and Terry, Prevention of Delinquency (New York: The MacMillan Company, 1968).
- Hardwick, Patrick C. and Wolfe, Harvey, "A Multifaceted Approach to Incentive Reimbursement," Medical Care VIII (May-June, 1970).
- Harris, S.E., The Economics of American Medicine (New York: The MacMillan Company, 1964).
- Health and Welfare Canada, Annual Report of the Minister of National Health and Welfare respecting operations of the Medical Care Act for the fiscal year ending March 31, 1972.
- _____, Hospital Insurance and Diagnostic Services (Annual Report, 1971-72).
- _____, Expenditures on Personal Health Care in Canada, 1960-1971.
- Herzberg, F., Mausner, B. and Snyderman, B., The Motivation to Work (New York: John Wiley and Sons, Inc., 1959).
- Hogarth, James, The Payment of the Physician (New York: The MacMillan Company, 1963).
- Homans, G.C., The Human Group (New York: Harcourt, Brace and World, 1950).

- Horngren, C.T., Accounting for Management Control (New Jersey: Prentice-Hall, Inc., 1970).
- Institute of Economic Affairs Limited (eds. and publishers), U.S.A., Monopoly or Choice in Health Services: A Symposium (1964).
- Jehring, J.J., The Use of Subsystem Incentives in Hospitals: A Case Study of the Incentive Program at Baptist Hospital, Pensacola, Florida (Madison, Wisconsin: Center for the Study of Productivity Motivation, 1968).
- _____, Increasing Productivity in Hospitals: A Case Study of the Incentive Program at Memorial Hospital, Long Beach (Madison, Wisconsin: Center for the Study of Productivity Motivation, 1968).
- Katz, Daniel and Kahn, Robert L., The Social Psychology of Organizations (New York: John Wiley and Sons, Inc., 1966).
- Lerner, M. and Anderson, O.W., Health Progress in the United States, 1900-1960 (Chicago: University of Chicago Press, 1968).
- Lewis, Paul M., "The Hospital Utilization Project of Pennsylvania," Medical Care 8 (July-August, 1970).
- Likert, Rensis, The Human Organization: Its Management and Value (New York: McGraw-Hill Book Company, 1967).
- Lincoln, J.F., Incentive Management (Cleveland: Lincoln Electric Company, 1951).
- Lindgren, Henry Clay, An Introduction to Social Psychology (New York: John Wiley and Sons, Inc., 1969).
- McClelland, D.C., Atkinson, J.W., Clark, R.A., and Lowell, E.L., The Achievement Motive (New York: Appleton-Century-Crofts, Inc., 1953).
- McClelland, D.C., The Achieving Society (Princeton, New Jersey: D. Van Nostrand Co., Inc., 1961).
- McClenahan, Dr. J. Everett, "Applying the Results of Utilization Measurement," Utilization of Hospital and Physician Services. Proceedings of the First Conference on Utilization, March 2-3, 1962 (Chicago, Illinois: American Hospital Association, 1963).
- McGregor, Douglas, The Human Side of Enterprise (New York: McGraw-Hill Book Company, 1960).

- McNerney, W.J. et al., Hospital and Medical Economics, Vol. 1 (Chicago: Hospital Research and Educational Trust, 1962).
- Mechanic, David, Medical Sociology (London: The Free Press, 1968).
- Mills, C. Wright, White Collar (New York: Oxford University Press, 1956).
- Nestman, L., A Feasibility Study into the Development of Physician Controllable Cost System by Diagnosis by Patient (University of Alberta Hospital, 1972).
- Pearlin, Leonard J., "Alienation from Work: A Study of Nursing Personnel," American Sociological Review 27 (November, 1963).
- Perrow, C., Complex Organizations, A Critical Essay (Illinois: Scott, Foresman, and Company, 1972).
- Presthus, Robert, The Organizational Society (New York: Knopf, 1962).
- Report of the Commission of Inquiry into Hospital Admissions, John M. Hunt, Chairman (Province of Manitoba: Queen's Printer, 1971).
- Rodman, Anne Clark, "Comparisons of Baltimore's Utilization Rates Under Two Physician-Payment Systems," Public Health Reports 80 (June, 1965).
- Roemer, Milton J., "The Influence of Prepaid Physician's Service on Hospital Utilization," Hospitals, Journal of the American Hospital Association 32 (October 16, 1958).
- Roemer, Milton J. and Shain, Max, "Hospital Utilization Under Insurance," Hospital Monograph Series No. 4 (Chicago: American Hospital Association, 1959).
- Rogers, E.S., Human Ecology and Health (New York: The MacMillan Company, 1960).
- Rosenfeld, G.B., "Critical Review of Fiscal and Administrative Controls on Cost and Use in Canada," Medical Care 7 (November-December, 1969).
- _____, "The demand for General Hospital Facilities," Hospital Monograph Series No. 14 (Chicago: American Hospital Association, 1964).

- Rothfeld, Michael B., "Sensible Surgery for Swelling Medical Costs," Fortune, Vol. LXXVII, No. 4.
- Sihvon, W.R. and Gent, J.V., "Incentive Programs at Greater Niagra," Hospital Administration in Canada, Vol. 12, No. 12 (February, 1970).
- Sloan, F.A., Lifetime Earnings and the Physicians Choice of Specialty (New York: Rand Corporation, May 1969).
- Somers, Anne R., Health Care in Transition: Directions for the Future (Chicago, Illinois: Hospital Research and Educational Trust, 1971).
- .. Hospital Regulation: The Dilemma of Public Policy (Princeton, New Jersey: Industrial Relations Section, 1969).
- (ed.), The Kaiser-Permanente Medical Care Program: A Symposium (New York: The Commonwealth Fund, 1971).
- Tannenbaum, A.S., Social Psychology of the Work Organization (Belmont, California: Wadsworth Publishing Company, Inc., 1966).
- Titmuss, Richard M., Commitment to Welfare (New York: Pantheon Books, 1968).
- U.S. Department of Health, Education, and Welfare, Reimbursement Incentives for Hospital and Medical Care: Objectives and Alternatives (Washington: Government Printing Office, 1968), Research Report No. 26.
- Vantilburg, E.G.Q., "How One Hospital Increased the Effectiveness of its Bed and Service Utilization," Canadian Hospital (February, 1971).
- Vollmer, H.M. and Mills, D.L. (eds.), Professionalization (New Jersey: Prentice-Hall Inc., 1966).
- Warner, W.L. and Low, J.O., The Social System of a Modern Factory (New Haven: Yale University Press, 1947).
- Williams, G., Kaiser-Permanente Health Plan: Why It Works (Oakland: Kaiser Foundation, 1971).
- Zaleznik, A., Christenson, C.R. and Roethlisberger, F.J., The Motivation Productivity and Satisfaction of Workers: A Prediction Study (Boston: Harvard University, Graduate School of Business Administration, 1958).

APPENDIX I

THE COMMUNITY HEALTH CENTRE

SUMMARY

In the light of the three issues noted in the Foreward, the Committee believes that:

1. In order to emphasize community care and to shift service patterns, community health centres should be established and linked with hospitals and other health services in a fully integrated health services system; they must not simply be added onto the present system. Nevertheless, the introduction of community health centres need not await the full integration of the health services system. They are in themselves the catalyst for the development of the new system -- in fact, they are essential to its concurrent development. Community health centres should be established now as non-profit. ("non-profit" excludes the standard share corporation where profit accrues only to the shareholders), corporate entities and in sufficient numbers so that new funding methods develop to promote the best use of resources. Enough community health centres must be introduced into the system to allow effective evaluation of their impact on the process of health services delivery.

2. Community health centres must offer a setting where care is provided through a multidisciplinary team. They should allow flexible and innovative uses of manpower

which will, by concentration on patients' problems, offer more comprehensive care to people. Payment systems, alternative to the present form of fee for service, which are conducive to the team approach and which are attractive to health professionals must be developed,

3. Community health centres must be clearly identified and accessible points where appropriate decisions can be taken about solving people's health care problems. They must promote a better balance between health promotion and prevention, diagnosis and treatment, and rehabilitation. They must, as necessary, relate to other health care services and community social services on a co-ordinated and integrated basis,

4. Community health centres must involve individuals more fully in decisions about service provision as well as in personal and family health care.

RECOMMENDATIONS

The Committee recommends:

1. The development by the provinces, in mutual agreement with public and professional groups, of a significant number of community health centres, as described in this report, as non-profit corporate bodies in a fully integrated health services system,

2. The review and modification, in consultation with appropriate public and professional groups, of existing

provincial legislation and regulatory measures affecting health professionals and practices to allow for flexibility and innovation in service provision,

3. The funding of community health centres through global or block budgets given by the province to the district level covering all capital operating, maintenance, and amortization costs,

4. That employment and deployment of personnel rest with the community health centre administration,

5. That payment for professional services in community health centres be based on training, experience, responsibility and workload; that payment systems be equitable, competitive and promote the objectives of the community health centre,

6. That payment mechanisms alternative to the present form of fee for service be developed and evaluated in discussions between governments, the health services system and the professions concerned,

7. That measures be developed by governments, in concert with appropriate public and professional groups, to assure that community health centres and the professionals working in them make the most appropriate use of other facilities, such as hospitals, and programs in the health services system,

8. That scientific evaluation of the impact of community health centres on the health of the population

served and on the overall costs of the health services system be co-operatively carried out by governments, universities, educational and research bodies, and professional groups during the planning, demonstration and implementation phases; that regular evaluation, through professional and administrative audit mechanisms (internal and external), of performance and utilization become an integral part of the operation of a community health centre,

9. That by agreement between the provincial, district and university health authorities, designated community health centres be affiliated with university health sciences centres and other educational institutions for the preparation of health and social services personnel,

10. That the development of integrated health and social service centres in various settings be studied and evaluated by government, the universities and professional groups,

11. That a comprehensive and co-operative campaign by governments, professional groups, and community and citizen organizations be carried out to inform the public and the health professions of the objectives of community health centres.

APPENDIX II

THE HEALTH SERVICES SYSTEM

SUMMARY

In order to make community health care a priority and to fully achieve the goals noted in the Foreward, the Committee believes that:

1. All health services must be integral parts of a health services system. This entails a whole-hearted commitment to common objectives and policies established through dialogue among governments, the professions, and the public,
2. Health care is becoming more and more accepted as a right. This idea must defined and acceptable boundaries placed on it, if society is to give rational direction to the planning, financing, development and evaluation of health services. Just as the concept of right must have its limits defined, so also must the idea of choice for the individual whether as recipient or as provider of service. These two concepts must be consistent both with the prevailing ethical and moral bases in Canadian society and with the willingness and capacity of society to allot the necessary resources for the attainment of broad health objectives. Some type of device acceptable to society must be found for distributing the resources available at any given point in time,
3. Creative planning and use of resources in further-

ing local priorities in addition to wider provincial and national ones requires some degree of decentralization of planning, policy setting, budgeting and implementation. Clear definition of functions, responsibilities and powers is necessary at all levels. All responsibilities and powers must be exercised so as to assure provincial and national basic standards of availability and accessibility. Although the Committee recommends decentralization, we recognize the wisdom of central planning and administration within a province, or group of provinces (or even federally) of certain services (e.g., data bank, manpower licensing and clearing house, surveillance and monitoring of services, laboratory services, watershed control, cancer radio-therapy, highly specialized rehabilitation (thalidomide children) etc.

Decentralization in the actual delivery of a service (as in the case of laboratory services) does not preclude such central planning. Account should be taken not only of political, economic, and communications areas but also of technological, referral, and consultation resources (e.g., health sciences centres).

Responsible and effective exercise of power requires substantial availability and control of money through some form of global or block program budgeting.

Federal-provincial cost sharing should encourage effective provincial planning. In turn, provincial financing

arrangements with district and/or local areas should encourage effective planning, consistent with both the wider national and provincial interests and/equity.

4. There must be clear information, referral and planning links between and among all elements in the system,

5. Any health services system can function effectively only when participants are willing to work together. They must all accept the responsibility to understand the purposes of services and use the system wisely. This will require a massive and continuing information and education program. It will mean real compromises and difficult decisions. It implies the active involvement of citizens in planning, advisory and policy making bodies, such as regional and individual institutional boards, whether government or voluntary. In order to assure equitable treatment within the system, grievance mechanisms are necessary for both recipients and providers of service,

6. Continuous evaluation, assessment and regular reporting of the extent to which policies and services work towards the achievement of objectives are necessary. Internal and external audit and review methods carried out under appropriate public and professional auspices must be integrated into the health services system.

RECOMMENDATIONS

The Committee recommends:

1. The immediate and purposeful re-organization and integration of all health services into a health services system to ensure basic health service standards for all Canadians and to assure a more economic and effective use of all health care resources,
2. The immediate initiation by provincial governments of dialogue with the health professions and new and existing health services bodies to plan, budget, implement, co-ordinate and evaluate this system; the facilitation and support of these activities by the federal government through consultation services, funding, and country-wide evaluation,
3. The establishment of the provinces of district or area administrations consisting of (a) a representative citizens board, and (b) a technical advisory body,
4. The use by provinces of program or block budgeting methods in the health services system,
5. The fullest practical introduction by federal and provincial governments of modern communication technology into the health services system,
6. The development by provincial government through negotiation with the professions and with new and existing services of less-costly and more appropriate alternatives to acute hospital in-patient care; coverage for these alternatives and for care in the home under federal and

provincial "health insurance" schemes,

7. The setting by governments, in negotiation with appropriate public and professional groups, of priorities for allocating funds for new and existing facilities,

8. The reduction by provincial governments of acute general hospital in-patient bed facilities,

9. The development and co-ordination at federal, provincial and inter-provincial levels of manpower policies, funding policies, educational programs and teaching curricula to assure an appropriate supply of personnel for the health services system,

10. The seating by provincial statute of representation of the general public on professional licensing and regulatory bodies,

11. The development by the provinces of adequate grievance and complaints bodies with powers to investigate and to redress wrongs,

12. The regular scientific evaluation of all planning, demonstration, and implementation of new and existing health services and of the overall health services system in terms of performance (including quality) and utilization by the provinces, universities and other education and research resources, and professional groups in mutual co-operation.

APPENDIX III

DESIGN OF HEALTH CENTRE

The Committee did not attempt to explore in any depth specific designs for community health centres where new physical facilities are required. This area requires further detailed study. However, our investigations and the evidence we had presented to us did lead to certain general conclusions:

1. Good design affects the ways in which services are provided within the facility and can educate professionals to do better work. Design can encourage or inhibit group interrelationships by its physical layout and aesthetic qualities. It can indicate a sense of warm welcome to the public and, hence, an openness to their involvement.

Considerable research has been done on these more subtle effects of design by architects, engineers, and health professionals; new dimensions of understanding are being added by psychologists, sociologists, interior designers, and others. Further co-operative research and demonstration is required in putting the essential lessons from these various sources into practice,

2. Choice, variation and adaptation of design to meet the precise needs for a given community health centre at any given point in time may be enhanced by using industrial engineering techniques including new computer applications,

3. The potential flexibility and economy of modern building techniques, such as shell and modular construction, and the use of standardized, readily available and easily serviced equipment should be fully explored,

4. Provinces should develop consultant services in the field of design, which go beyond the purely architectural and engineering aspects. A range of model plans should be developed. With federal initiative, a national clearing house of information and ideas should be developed. The interest and support of the professional groups and other private organizations with special expertise in this field should be actively developed through, for example, seminars, design contests, research and demonstration grants,

5. All major building and renovation should be approved at the district and provincial levels in the health services system to assure local conditions, standards, etc., are met.